NOT TO BE TAKEN AWAY

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DATA AND TESTS IN THE STUDY OF THE EXCEPTIONAL CHILD.

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IN treating of the general subject of gathering data which would allow the teachers to understand the condition of every child in the class-room, I may be allowed to refer, in a measure, to my paper at the Boston meeting of the N.E.A. on "Danger Signals in Young Children," and to partially quote from this paper.

"Apparent disinclination to mind the teacher may be due to imperfect hearing; aversion to reading and writing to imperfect vision. Ugliness and irritability may be caused by astigmatism, which, in its turn, produces eye strain and persistent headaches. Laziness may be a symptom of anæmia or neurasthenia, or it may be caused by malnutrition, over-exertion at home, lack of sleep, or of ventilation in the child's sleeping chamber. Fretfulness may have its source in a great number of various conditions, notably indigestion. Educators are oftentimes inclined to feel very much vexed when a child makes grimaces, is inclined to giggle and babble, and to disturb the artificial discipline of the schoolroom by whispering. And yet these manifestations, as well as others, like sniffing,

coughing, restlessness, and inattention, may be, and almost always are, symptoms of nervous disease. They may be enumerated among the so-called habit-tics or habit-spasms, like twitching, shrugging, shuffling, grinning, sighing, yawning, echolalia (the repetition of words spoken by another, as, for instance, repeating a question before answering it), uttering curious sounds, such as chirping, etc. Again, momentary inattention and absent-mindedness may be due to a mild form of *petit mal.* Sudden attacks of excitement, outbreaks of temper, destructiveness, hitting other children, and the like are clear indications of psychic epilepsy. Then there are the manifold movements characteristic of chorea, and while true hysteria is not a disease which develops before the adolescent age, there are quite a number of conditions in children which may be counted among hysterical symptoms. An emotional temperament is one of them, and the instability of will and irresponsibility another.

"Children's lies are a chapter in themselves. Books have been written on the child as a witness, showing how unreliable are the statements of children, even of those who are usually considered truthful. Stubbornness and disobedience, qualities which are usually considered largely in the sense of disciplinary conditions, may reveal themselves to the careful observer as danger-signals indicating disease of some kind.

"If it is our desire to make a more detailed study of danger-signals, we must first train ourselves in the power of observation. We must develop the observational attitude of the diagnostician and consider everything as a symptom which we cannot readily explain. And for every symptom we must train ourselves to look for a cause. Proper observation implies a careful distinction between the facts observed and the explanation we may give them. It is a very common error to interpret a condition wrongly, to substitute our opinion for an observed fact, and thus records of children are often vitiated. We allow our own personal impression and reaction to interfere with what ought to be a scientific statement. The personal equation must be ruled out as much as this is possible, and we must be careful in weighing the evidence. We must take into consideration our own emotional condition, which is a variable factor. What would seem a difficult proposition to us one day would appear simple and easy on another day. And only one who can inspire a child with confidence, and who puts the subject of observation absolutely at its ease, will gather reliable data."

Before taking up the subject of actual tests, which would enable school authorities to diagnose the case of the child, observation on

which led the teacher to believe that it needs special attention, I will take the liberty of pointing out some general conditions.

The causes of some of the symptoms enumerated, and others which have not been mentioned, may be found not so much in the child as in the school and the home of the child. Inattention, laziness, unwillingness, etc., may prove that all is not right in the relation of the teacher to the pupil, or that the school and its curriculum is not fitted for that particular child. Let me remind you once more of those children whose mentality differs from the average by representing a variation upwards. The barriers of ordinary grading must be broken down, and the school tasks must be so organised that the brighter or more active child may do more work, perhaps even within the same circle of lessons, than the slower and less intellectual child. A great deal will yet have to be said about the readjustment of our public school courses to enable us to individualise very much better than can be done under the present system. It is impossible to enter into a discussion of this tremendously important subject in this lecture. I will only emphasise as strongly as I can that we must face this part of the problem of the exceptional child with at least as much thoroughness as in handling the problem of the laggard and defective.

Two things can and must be done at once. I first refer to the hygiene of the daily programme. Experimental psychology has established data which show that there are distinct fatigue curves in the school day of a child, and that the programme must be adjusted to these curves. There is a traditional daily programme in the schools which may have to be modified. There is a maximum of energy in the forenoon from about ten to eleven, and again in the afternoon from about three to four. These maximum periods may change according to race and climate. But it stands to reason that they should be utilised, and that lessons implying greater mental strain be put into that part of the programme. And you must not forget that manual training and gymnastics are not in themselves recreation periods. They may require as much mental concentration as arithmetic. The problem of recesses and of lunches, the problem of one or two sessions, are all factors entering into the hygiene of instruction.

The second point to be mentioned is the hygiene of the *schoolroom*, with its illumination and ventilation, its blackboard arrangements, and desks and seats, and so on. Many symptoms observed in the pupils of a class are danger-signals indicating vitiated air and insufficient light.

But there are matters outside of the school which require the teacher's attention. Most of them have been discussed over and over again. It is obvious that children who are not properly nourished at home, who sleep in unhygienic quarters, who are made slaves of outside of school hours, who work hard carrying papers and doing other things before they come to school, or who are out in the streets or in amusement places, even with their parents, late at night, cannot possibly have a normal alertness during school hours, where they are supposed to do their most concentrated mental work. Through parents' meetings, mothers' clubs, parent-teachers' associations, Board of Health bulletins, and what not, efforts are being made now to remedy these conditions. I will not dilate upon them here, and only mention them as conditions which require the most serious attention of school people.

It cannot be expected that the regular grade teacher should make any special observations or give any particular special tests in the schoolroom. Children whose progress or conduct in the regular grade is irregular, if otherwise there is an elastic school curriculum, should be transferred into *observation groups*. Here, under the principal's more special supervision, a specially trained teacher, assisted by the school physician and the pædiatric expert, may proceed to diagnose the individual case more closely. The special organisation in regard to the further procedure—the removal of a pupil into an ungraded class or into special schools, into hospitals, sanatoriums, farm schools, or what not—will depend upon local conditions. What we are now concerned in is the method of investigation. I will submit in outline a system of tests and examinations, based upon rational principles, which it may not be possible to carry out in all details everywhere, but which, with the increased establishment of what has been called psychological clinics, and what I would prefer to call paidological clinics, may in the long run prove to be the most efficient system.

Realising that body and mind are two aspects of the same personality, we must first endeavour to establish whether there has been normal growth in either direction. We have learned to appreciate, and Dr. C. Ward Crampton, of New York, has been one of the foremost to establish this fact, that the age of a child in years, the so-called chronological age, means little or nothing. Even the child's tailor has to recognise this fact, and will tell the mother that for this boy of ten she will have to buy a twelve-year size, and for this girl of eight, only a six-year size. But the significance of these tailor measurements has rarely dawned upon the

loving mother. And still less did the teacher dream that the child who does not wear clothes commensurate to its chronological age may also have a mind which is, in a sense, a misfit.

Just as the anatomical structure of a child may either be in advance or behind its years, likewise its mental, moral, and volitional development may be accelerated or retarded. Any discrepancy between the standards of such development for any age, as they have been determined by countless measurements and tests, is apt to cause a tension fraught with danger. An exceptionally bright child whose anatomical and physiological development is immature, is destined to suffer a collapse before complete maturity is attained; a slow child whose body growth is normal and whose functions are unimpaired may oftentimes be taxed much more intensely on the intellectual side, and eventually disclose its dormant power.

There are, then, properly and regularly repeated body measurements. These may be made as elaborate as opportunities will allow. Height and weight measurements are most important for average results; and recently Prof. Thomas Morgan Rotch, of Harvard University, has suggested an interesting test by the method of taking X-ray pictures of the wrists of the hands; the development of the carpal bones, and of the lower epiphyses of the radius and ulna, is indicative of the structural age of a child. In this connection it is interesting to remember earlier observations which showed that the freedom of wrist movement in a child is not attained before the eleventh year; a study of the carpal bones will explain to the physiologist the cause of this fact, which is very important in the matter of actual activity, including, for instance, the playing of piano, or violin, as well as sewing, painting, and penmanship.

Further observations can be made in the various provinces of the physiological functions. Facts of respiration and heart action, of appetite and digestion, of headaches and dizziness, of muscular strength and grip, enter into this group of observations. It has, for instance, been found that the grip of a hand is a good index of intellectual development.

I will omit in this connection further details about physiological tests, which can be made by the physician, such as examinations of the urine, the blood, etc.

It might seem needless to say that any weakness of the special senses must be considered a danger-signal. Yet even defects of vision and hearing are often overlooked, and what is caused by inability to see and hear distinctly is ascribed to inattention and

unwillingness. The acuteness of these two most important senses should be determined by the ordinary tests, which are so simple that they can be employed anywhere. As has been said before, eye-strain is very frequently accompanied by headaches; chronic headache is therefore a danger-signal. The other special senses—taste, smell, and touch, not to speak of the muscular sense—rarely receive the attention they deserve. Yet we often find curious defects which may be considered as indicative of incomplete potentials, and, consequently, of incomplete sensation. If we remember that under certain circumstances we may have to fall back upon one or more of these neglected senses, as in the case of Helen Keller, we may well be reminded of their importance.

Defective teeth are invariably a danger-signal. They may prove the existence of various functional diseases, hereditary or acquired, which prevent their proper formation and growth; or they may point to malnutrition and other temporary causes. In every instance defective teeth interfere with the proper mastication and digestion of food, with the protection of the naso-pharyngeal cavity, and with proper articulation.

It has often been suggested that left-handedness is a danger-signal. It certainly indicates a deviation from typical conditions. Right-handedness is a very ancient characteristic of the human race, and even primitive people are practically right-handed. Left-handedness is therefore not to be considered in the light of a primitive trait. As a matter of fact, left-handed individuals are found among the very intellectual and skilful; left-handedness is, then, not in itself a danger-signal unless it is coupled with other defects. It has been shown that the usual right-handedness may have one cause in the arrangement of the blood-supply from the heart which favours the right arm; left-handedness would, therefore, mean a reversion of this arrangement.

Another cause of the right-handedness of the great majority of men, however, is the stronger development of the left hemisphere of the brain. When, therefore, left-handedness is connected with speech defects, as it often is, it would reinforce a diagnosis of defective central condition; for speech defects, unless caused by anatomical defects in the organs of speech, can be explained only by under-development or lesion in the speech centres of the left hemisphere. Speech defects are most pronouncedly danger-signals.

Here we come to the large number of danger-signals in the development of the nervous system. And this is at the same time the province of psychological disorders. It must, however, again be

stated that there is a constant interaction between bodily and psychic conditions, and that it is impossible to separate absolutely the psychical from the physical. Bodily symptoms will indicate psychic defects, and psychic symptoms will indicate disturbance of physiologic functions. Some of the danger-signals in this province are changes of temperament (crying or laughing readily) and unwarranted attacks of temper; rapid fatiguing and disinclination for effort, drowsiness, excitability, insomnia. Of the habit-spasms I have already spoken. Then there are defects of memory and judgment as well as lack of determination and decision. A mechanical memory alone is not a sign of intelligence, and is found in remarkable development even among imbeciles. Precocity is another sign of eventual nervous strain and derailment.

Some very complete measuring scales for intelligence have been recently suggested by such men as Dr. Sante de Sanctis, of the University of Rome, Italy, and the famous French psychologist, Dr. Binet. They combine motor, sense, and intellect tests, so graded that we may determine the psychological age of a child by applying them systematically. As they have been tried with a great many children they may be considered fit to give truthful results. If, for instance, a child of nine years cannot respond properly to all the tests suggested for children of this age, but only to those prescribed for children of eight or even seven, we have a grave danger-signal in the matter of intellectual development.

In the sphere of will we must consider signs of weakness and indecision, of wavering and changeability; and any perversion of will, moral defects, like persistent lying and stealing, are plain indications of pathological development.

The Binet tests do not include any will-tests, and it is difficult to devise any for any special set of observations, except that the reaction of the child in general will allow of conclusions in regard to the volitional element, the element of attention, concentration, and purposefulness.

Binet has elaborated tests for children of three to thirteen, and for ordinary purposes in the school practice they are sufficient. Children who can pass the judgment tests devised for the age of twelve to thirteen may be assumed to have sufficient rational endowments to proceed further, or more broadly speaking, persons, even though they should be older chronologically, who can satisfy these tests, may be retarded, but certainly are not arrested in their development. We may venture the assertion that "arrested" development does not rise above the tests for the tenth or eleventh year.

The Binet tests have been Americanised by Dr. Goddard, of Vineland, and I have myself modified them to meet some criticisms which may perhaps be made against them.

My own main criticisms are that they are somewhat meagre, and that it is perhaps delusive to have them so minutely graded by years. I have been for years at work on a set of intellectual tests, which are now approaching final shape, and in which I divide the children into groups on a little different basis. It has been my endeavour to develop the essential truths in the " culture epoch " theory, so that it may correspond with the realities of child life, while in its old and crude form it has met with much just criticism. In my forthcoming book on 'The Career of the Elementary Child from the Kindergarten to the High School,'* those who are interested will find a complete elucidation of my own conception of this theory. Suffice it to say here that I have divided the development of the child from infancy to maturity into four principal periods. The first of these is the *human-animal stage,* up to about the fifth or sixth year. The second is the *race period,* from six to eleven. During this period those characteristics develop which differentiate one race from another. In the third, from eleven to fifteen, the *national characteristics* arise, and in the fourth, from fifteen upwards, *family traits* and *individual tendencies* assert themselves vigorously. There are, naturally, subdivisions. For instance, the second year in a mentally normal child marks the *naming period,* when a child is instinctively bent upon learning and applying the *names* of things. The next year develops the conception " of the outside " and " inside " of the body. Following is the period of doll fetichism, a tendency which, especially in girls, lingers through the second main period. The last year or two of the first stage, let us say the fifth year, matures the tendency to *count,* and in this way leads over to the next stage, as counting introduces the number concept. The years from ten to twelve are the pre-pubertal years when tribal instincts arise. The individualistic period is also the adolescent stage.

In my own tests I am endeavouring to meet the emergencies of these periods and sub-periods rather than of single years. To elaborate a really satisfactory set of tests will require considerably more detailed study and research, and we must exercise patience before the final aim can be achieved. But what we have developed so far will allow us to make a good beginning in grading children psychologically.

" To make the status of a child still more evident, it will be

* Boston : The Gorham Press, Richard G. Badger.

necessary to include data from the earliest history of the child, and as much of the family history as can be ascertained. Only a complete tabulation of all these data will show all the danger-signals which we ought to know about in their perspective, so that we may neither under-estimate nor over-estimate. It is evident that any single fact may mean little or nothing unless it is taken in conjunction with other facts. And a consensus of various observers will eliminate the element of personal error or emotional bias."*

Investigations like these in their totality may appear staggering, and it may, perhaps, be claimed that it is impossible to study every child so minutely. Perhaps it is, and it may not be necessary to go into so many details with every child. Parents, of course, will have to learn to know their children much better than they do now, and they have many more opportunities and more time for detailed study. But for school purposes only a minority of the children need closer examination, and only a small fraction will need the searching study here suggested. If the observation class does its work and the special children are properly transferred, a way will be found to give those who need it the most the benefit of such work.

A large school system will find ways and means through the co-operation of your school officers with the Board of Health, with medical experts and social workers, to develop this system in its entirety, if not at once, then certainly by successive steps. Smaller school systems may have to be fitted with a simpler organisation, but the more essential tests, even including tests of the special senses, and the Binet or my own tests, together with body measurements, can be made in every ever so modest school. They do not require elaborate apparatus at all, and there will always be physicians broad-minded enough to assist the school authorities whenever special examinations are needed. Neurologists, oculists, dental surgeons, and other specialists have always been ready to come forward to do their share voluntarily. In fact, the medical profession has done a great deal in opening our eyes to the necessity of this work. What cannot be done by one township can be done by the country for the schools of all the townships. What cannot be done by a country can be done by the State. When we once realise what should be done it will be done. Even in the present embryonic stage of the work with the exceptional child, agencies for investigating its status are springing up everywhere, and they will carry their usefulness through field-work and organisation into the smallest hamlet. Let us establish in our own minds a complete

* "Danger Signals in Young Children," N. E. A. Meeting, Boston, July, 1910.

understanding of the problem, and let us all do our best to spread the gospel and to carry out as much of the work as is within our reach.

AURICULAR AND PERI-AURICULAR DERMOIDS, FISTULÆ, AND TUMOURS OF CONGENITAL ORIGIN.

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There is a common fallacy handed down by the scribe from book to book that congenital irregularities of all degrees are more prone to malignant disease than normal tissues. Thus a premise of ill-founded origin has become an obstacle to many an investigation on cancer.

The manifold configurations of the external ear arising out of the fusion of several units in a region of great complexity, though of great interest in the study of our evolution from aquatic ancestors, first drew the writer's attention as a suitable source for inquiry into any relations existing between congenital lesions and cancer.

The development of the special sense organ of hearing is purely ectodermal, and entirely separated from the brain.

Morphologically the ear consists of two distinct parts:

(1) The auditory organ proper—the otocyst or membranous labyrinth—of ectodermal origin, and presently to be considered in relation with post-auricular dermoids.

(2) The accessory parts, of which we will here only consider the external ear. These accessory parts arise by modification of the mandibular and hyoid branchial arches and of the hyo-mandibular cleft.

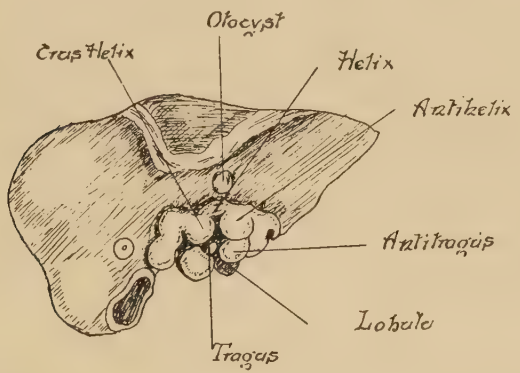
The external ear.—Before the end of the first month of intra-uterine life a series of six rounded eminences known as the auditory tubercles make their appearance around the hyomandibular cleft; with their resulting fusion and metamorphosis the pinna is formed. Until the third month there is no difficulty in identifying these primary tubercles, but during this period rapid changes occur and the greater number of malformations are produced.

As the result of imperfect fusion of these auricular tubercles supernumerary tubercles or auricular fistulæ may occur. If the orifice of the fistula becomes closed a dermoid cyst of the pinna

forms. By vascular, pigmentary or hairy irregularities, and other inclusions, pigmentary areas, hairy patches, hypertrichosis, nævi (hæmangiomata and lymphangiomata) and even teratomata occur.

These anomalies are more usually seen in the region of junction

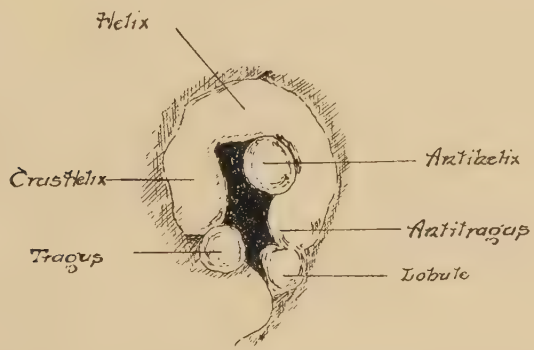
Fig. 1.



of tragus with crus helicis, of crus helicis with helix, between antihelix and helix, or by an incomplete formation of the lobule.

Be it understood that in this short account only congenital malformations are referred to; all conditions resulting from injuries, extravasated blood, adhesions secondary to inflammatory processes,

Fig. 2.



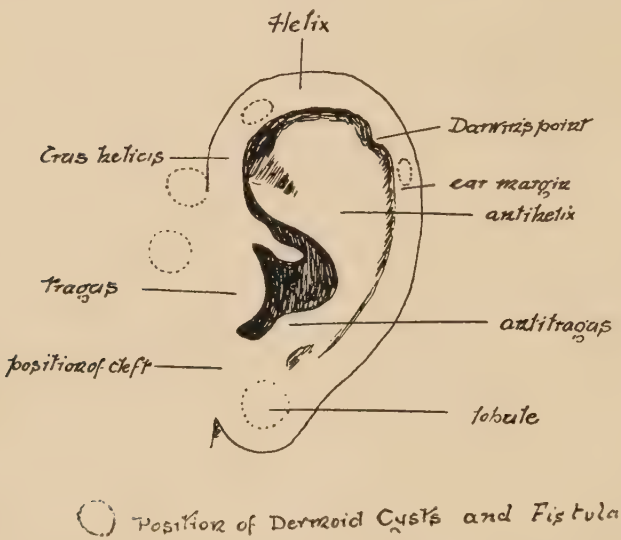
traumatic fissures consequent upon ear-rings, and such tumours as fibromata, keloid and epithelioma are here omitted.

Of all the malformations treated, accessory auricles or pre-auricular appendages form by far the most common variety; but I do not propose in this paper to further consider these interesting anomalies.

Fistulæ of the external ear.—Usually these fistulæ have only a small opening leading into a narrow canal of no great depth, with a blind extremity in the substance of the helix. Very often a small incrustation covers the fistula; when this is removed a drop of sero-purulent fluid is exposed to view. This secretion is under ordinary circumstances less abundant, so that many persons are happily unconscious of its presence.

The presence of sebum in these helical fistulæ is sufficiently explained by the presence of sebaceous glands, which can be seen in an unusual number in ordinary microscopic sections of this

Fig. 3.



region. Oftentimes the secretion is retained, and a small tumour which may even attain a relatively considerable size results.

The direction of the canal is usually downward and forward, where a retention cyst may form and even suppurate.

The variety which occurs in the lobule—coloboma auris congenitum—is more rare, but at the corresponding site pigmented moles, nævi, hairy patches, and even teratomata occur.

Some observers incline to look upon many of the helical fistulæ and the pre-auricular appendages as derived from the maxillary process of the mandibular arch, urging that the direction of the fistula and position of the cyst are in linear continuity with the mandibular tubercle.

Those specimens which evidence macrostoma with helical fistulæ

appear to show the continuity of the maxillo-mandibular cleft; the theory which considers the fistulæ due to incomplete fusion of two

Fig. 4.

Helical fistula.

Fig. 5.

Nævus of lobule and surroundings.

primary auricular tubercles is simple and explanatory of the majority of cases; further, the frequent presence of a groove running to the fistula in helical fistulæ supports this view.

Fig. 6.

Hairy (pigmented) mole of lobule (with coloboma).

Fig. 7.

Pre-auricular dermoid cyst.

Cysts and tumours around the ear.—The development of the external ear in itself testifies to the multiplicity of sources of

invagination of ectoderm which would occasion dermoid cysts. Yet the pinna, the situation of fistulæ, is not a frequent seat of dermoids

Fig. 8.

Lymphangioma—supra-auricular.
(? relation to angioma or acanthoma).

Fig. 9.

Fibroma of scalp.

and allied tumours; in the peri-auricular regions many such tumours are found, so that the following classification will be useful:

(1) Auricular, (*a*) pre-auricular.

Fig. 10.

Sarcoma.

Fig. 11.

Post-auricular dermoid.

(2) Peri-auricular, (*b*) supra-auricular, and (*c*) post-auricular.

From previous statements the origin and situations of auricular cysts need not further detain us.

Pre-auricular dermoïds have at least two sources of origin: (1) Errors of fusion of the anterior auditory tubercles. (2) Errors of fusion of the maxillary and mandibular processes of the first branchial arch.

These cysts seldom grow to a large size, but remaining small are likely to be mistaken for sebaceous cysts, an enlarged parotid lymphatic gland, or a parotid cyst.

If a careful clinical examination reveals an allied congenital error the diagnosis is aided but never completed until the microscope decides the presence or absence of dermal structures in the cyst wall.

Supra-auricular dermoids may lie directly above the ear or in a line extending backwards from the orbit and corresponding to the oblique cleft, so that the anterior cysts are more usually described as dermoid cysts of the outer border of the orbit.

If this view be correct it is more easy to conceive of the many varieties of tumours found in this neighbourhood, *e. g.* dermoids, lymphangiomata, fibromata, acanthomata, teratomata, and sarcomata.

Post-auricular congenital tumours.—The post-auricular series may advantageously be considered as three sets arising from three distinct sources, thus:

Set.	Arising from—
(1) Upper .	Posterior limit of oblique cleft.
(2) Middle .	Otocyst.
(3) Lower .	Posterior ends of second branchial groove.

Small rounded swellings of congenital origin are observed in the post-auricular region, which is devoid of hair and is known as Wilde's area. When closely examined they are slightly movable, having usually some attachment to the temporal bone in the line of the petro-squamosal suture but not attached to the overlying skin; they are usually so tense that fluctuation is indiscernible; these are dermoid cysts of the middle set. A close consideration of the development of the external ear shows us that such cysts or other congenital tumours lie behind the opercular folds, whence the tubercles which comprise the pinna are derived.

These tumours arise in relation with slight defects in the development of the internal ear.

The first indication of the internal ear appears about the fifteenth day as a circular thickening of the ectoderm, just over the dorsal end of the first branchial groove. This auditory pit deepens, sinking into the subjacent mesoderm, eventually becoming divided off from the ectoderm as a completely closed sac—the auditory vesicle or

otocyst; however, a small process from one side of this represents the remains of its connection with the surface and forms the ductus endolymphaticus.

It is, moreover, more than probable that the rarer tumours known as congenital cholesteomata arise in connection with the development of the otic vesicle. The cholesteomata have, from

Fig. 12.

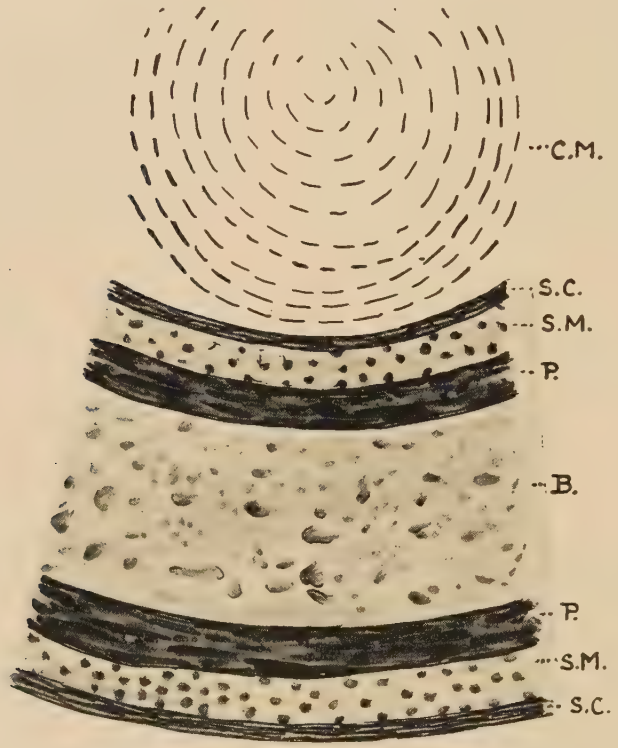


Diagram to illustrate relation of cholesteoma to dermoid. S.C. Stratum corneum. S.M. Stratum Malpighii. P. Periosteum. B. Bone. C.M. Cholesteomatous matter.

within, the same relation to, and effect upon the bone as the dermoids have from without.

The lower set of post-auricular dermoids are formed in connection with the curling over of the operculum of the second branchial groove.

To embrace a clear understanding of embryonic physiology it is imperative to view organs not performing functions, but organs being

evolved; hence the perverted physiology or the pathology of the embryo is evidenced in irregularities or deformities.

The origin of the supra-auricular dermoids and of the upper set of the post-auricular dermoids which are formed in connection with the oblique cleft and its posterior edges may have some evolutionary relation with the cephalic shield of the armadillo.

A CASE OF LYMPHO-SARCOMA.

By G. F. Vincent, F.R.C.S.Ed.,
Surgeon to the Cottage Hospital, Woking.

I was asked to see a boy, aged 9 years, on Sunday evening, July the 9th, as his abdomen was swollen. I saw him at 9·30 p.m., and was told by his mother that she noticed on the night previous while giving him his bath that his abdomen was enlarged; that he had vomited once or twice, and that the bowels had acted three times that day. She said that two or three weeks before this some friends had remarked to her that he was not looking well and seemed paler and somewhat thinner, but she had not noticed it herself.

On the Sunday night when I saw him his temperature was 97° F. and his pulse 100. The stomach appeared to be distended and the costal arches were pushed forwards. A considerable amount of free fluid could be detected in the abdomen, and percussion did not give rise to any pain.

On Monday, July the 10th, his temperature was 97° F. and pulse 104, and the distension of epigastric and hypogastric regions was more pronounced. He complained of a slight pain occasionally in the right hypochondrium and had some difficulty in micturition. He vomited once and the bowels acted three or four times during the night.

He measured over the epigastrium 26 in., over the umbilicus 23½ in., and from the xyphoid cartilage to the umbilicus 6½ in.

On Tuesday, July the 11th, temperature 97° F., pulse 108. He did not complain of any pain, but lay in bed reading. He was removed to the cottage hospital in the afternoon, and at 8.30 p.m. opened in the mid-line, when about four pints of clear fluid came away. On inserting the finger I felt a large swelling about 3 by 2 in. attached to the anti-mesenteric border of the hepatic flexure, with several swellings the size of a marble dotted over the intestine

above and below this, also a swelling the size of a hen's egg surrounding the gall-bladder. Through the incision I pulled out the growth with a portion of the intestine, but in doing so it broke, for it was very brittle, although its walls appeared to be about ½ in. thick. As the gall-bladder and a large portion of the intestine were involved I decided not to proceed further with the operation. He was also suffering considerably from shock, and vomited about half a teacupful of "coffee grounds." I replaced the swelling, put in a large drainage-tube, and sent him back to bed. He died in thirty-six hours.

The autopsy showed the growths on the intestine and gall-bladder mentioned, also large nodules on the lesser curvature of stomach and round the duodenum.

The specimen was sent to the Clinical Research Association and the report was as follows: "These tumours are infiltrated by identical growths. They are composed of small, round, deeply stained cells in a delicate reticulum with thin-walled vessels. The intestine is infiltrated in all its coats, but the mucous membrane is still recognisable. The general structure is that of a lympho-sarcoma."

Association Française de Pédiatrie.

Held at Paris, July the 29th and 30th, 1910.

M. Hutinel, *President.*

First Discussion.

The Functions of the Thymus, by M. Weill (Lyons).—The thymus is a lymphoid organ developed in the glandular system at the embryonic period whose epithelium persists after birth, but in a very rudimentary form (reticulum cells), or as degenerate elements (Hassall's corpuscles). The lymphoid tissue of the thymus is remarkable for its extreme sensitiveness to accidental and pathological influences. The lymphocytes in it are endowed with extreme mobility both as regards their disappearance and reappearance. The elements of epithelial origin which persist, when compared with other glandular elements as regards their structure, do not seem to play any important *rôle.* The physiological involution of the thymus at the time of puberty indicates that the *rôle* of this organ is temporary. The thymus is not indispensable to life; in its extra-uterine life it does not seem in any way comparable to glands with an internal secretion, such as the thyroid and suprarenal. There is nothing to show the existence of hyperthymic syndrome. The structure and functions of the thymus as far as is known closely resemble those of the lymphatic glands. Like these, but more actively, it

reacts to infections and intoxications, and is subject to retrogressive involution with the progress of age, while the precocity of this retrogression seems to have a direct relation to its extreme sensitiveness.

The Pathology of the Thymus, by Prof. Marfan (Paris).—In summarising all known conceptions of the pathology of the thymus, prominence was given by the speaker to the study of hypertrophy of this gland in children, and to the symptoms which lead to its diagnosis and the indications for thymectomy. (1) In infancy the most frequent cause of hypertrophy of the thymus is a lesion to which the name of "simple hyperplasia" may be given. The change is only one of the manifestations of those proliferative reactions which may attack any of the hæmo-lymphatic organs in the course of infections or intoxications, and of which syphilis and tubercle seem to be the most common. This ætiology explains why hyperplasia of the thymus often co-exists with rickets and enlargement of other lymphoid organs (glands, tonsils, spleen). Clinically, hypertrophy of the thymus is sometimes latent, and this is most frequently the case; at other times it causes symptoms of compression. (2) When latent, it can only be recognised by systematic percussion and radioscopy. Percussion gives absolute dulness over the manubrium, having a triangular outline with the base uppermost. This sign is not constant, as the edges of the lungs may cover the hypertrophied thymus. Radioscopy shows an enlargement of the median supracardiac shadow touching the two borders of the manubrium. This sign if properly interpreted is of very great value. The hypertrophied thymus may press on the various organs in contact with it either directly or indirectly, but pressure on the trachea and vessels only has been demonstrated. (3) Pressure on the trachea shows itself by dyspnœa, stridor, and recession. It may be chronic and paroxysmal, or occur in attacks with long intervals of tranquil breathing; only one attack may occur, and end fatally. The characteristics of the stridor and dyspnœa due to thymic tracheo-stenosis may best be studied in the chronic form. Chronic thymic stridor makes its appearance in the first weeks, sometimes in the first few days of life. The respiratory sound is heard both with inspiration and expiration, but is louder with the former; it is accompanied by inspiratory recession of slight degree. Thymic stridor is intensified by hyperextending the neck and by the dorsal decubitus in sleep. It does not change the voice, and when the child coughs there is neither any laryngeal nor bitonal character about it (enlarged glands). The stridor does not disappear when a short tube is placed in the larynx, it is hardly modified by a tracheal tube, and it is only occasionally relieved by the introduction of a long tube. Often, but not always, it is accompanied by absolute dulness over the manubrium, and almost invariably co-exists with a marked increase in the thymic shadow by radioscopy. By placing the tip of the index finger in the suprasternal notch an expiratory bulging is sometimes perceived, caused by a kind of hernia of the thymus (Rehn's sign). Jackson was enabled by tracheoscopy to ascertain a flattening of the trachea at the level of the upper strait of the thorax. When the child is quiet and awake the stridor is slight, sometimes scarcely perceptible; but under the influence of crying, anger, hyperextension of the head, or dorsal decubitus during sleep, attacks of dyspnœa supervene, more or less violent, during which the stridor becomes intense and the recession very marked, while signs of respiratory embarrassment are evident. This dyspnœic paroxysm lasts from a few minutes to several hours. Most often it disappears without leaving any after-effects, but may end

fatally. Children who have thymic stridor are subject to bronchitis and pulmonary congestion. These complications favour in a marked degree the occurrence of the paroxysms of dyspnœa and aggravate their effects. The general health of these subjects is variable and depends on many circumstances (feeding, digestive disturbances, etc.). Thymic stridor often coexists with rickets and polyadenitis. It generally disappears towards the end of the second year, doubtless owing to the diminution in bulk of the thymus and its involution. When this form of chronic thymic stridor is met with, having the foregoing characters, it must be differentiated from other forms of noisy breathing in infants. These are not due to a single cause, and it is a mistake to describe under the head of "congenital stridor of the newborn" all the kinds of noisy breathing which appear at birth or a little later, and to attribute them to the same pathological condition. *Congenital vestibular stridor* is distinguished from thymic stridor by its exclusively inspiratory characters and by examination of the upper orifice of the larynx, which shows malformation of the epiglottis and approximation of the aryteno-epiglottic folds. Stridor due to *tracheo-bronchial compression by tubercular mediastinal glands* is especially expiratory: percussion, auscultation, and radioscopy show its origin. Stridor from *paralysis of the dilators of the glottis* is almost exclusively inspiratory, but in a young child is always caused by enlarged tracheo-bronchial glands, the signs of which should be sought for. The snoring due to *adenoid vegetations* is recognised by its tone, by its becoming less on closing the nostrils, and by examination of the naso-pharynx. (4) Thymic tracheo-stenosis may be *intermittent*, and show itself by attacks of dyspnœa and stridor, having precisely the characters described above, and excited by the same causes (hyper-extension of the head, dorsal decubitus, etc.). In the intervals the breathing is normal or nearly so. Death may occur in any of these attacks, even in the first and only one. These attacks must be distinguished from those of acute laryngitis, retro-pharyngeal abscess, asthma, and spasm of the glottis. (5) The hypertrophied thymus may also compress the *large vessels* at the base of the heart, especially the vena cava and left tracheo-cephalic venous trunk. Compression of veins is rarer than that of the trachea and is usually associated with it. Can the hypertrophied thymus compress nerves? Probably it can, but there is no known fact to comfirm it. (6) In subjects who die suddenly or rapidly, or unexpectedly by *syncope*, particularly during *surgical anæsthesia*, it often happens that the autopsy fails to discover any plausible cause of death, but the thymus is noticed to be large, without, however, seeming to exert any pressure on neighbouring organs. This is called "*thymic death*." The speaker showed that many different conditions have been described under this heading. Different theories have been brought forward to explain it, such as the lymphatico-thymic dyscrasia of Paltauf, the hyperthymism of Svehla, and compression of the right lower cardiac nerve, of the pneumogastric or phrenic. None of these things have been proved. (7) When the diagnosis of hypertrophy of the thymus has been established mercurial treatment should always be resorted to; if it fails, a trial should be given to drugs employed in all lymphatic hyperplasias (saline baths, arsenic, iodine, calcium); adrenalin by the mouth, two to four drops daily, may be also tried. In the serious accidents due to compression remedies with more rapid action are indicated. If the symptoms are not too threatening an attempt may be made to reduce the bulk of the thymus by radiotherapy; in the contrary event thymectomy is the treatment for choice. When the urgency and immediate gravity of the dyspnœa and cyanosis do not permit

of this operation, an attempt may be made to introduce into the larynx and trachea as long a tube as possible, but tracheotomy, and especially the introduction of a short tube, are useless. If the urgent symptoms can be by this means ameliorated, the situation can be made use of to practice thymectomy.

Surgery of the Thymus, by M. Veau.—The surgery of the thymus deserves an important place in the treatment of a disease against which we have been hitherto powerless. The operative interference of choice is subtotal subcapsular thymectomy ; it is a safe operation. In five cases he had operated on, the children were able to leave the hospital in a few days. The results obtained might be grouped under four heads : (1) In the *crises of suffocation* intervention constituted an operative indication of the highest order. (2) In *permanent dyspnœa* without crises of suffocation intervention is less indicated, but when resorted to it produced excellent results. (3) In *spasm of the glottis* intervention is only indicated when there is hypertrophy of the thymus. (4) In cases of *thymic stridor* the effects of operation are less encouraging in the sense that if the respiratory bruit disappears the relief is only temporary. We should only intervene if stridor is accompanied by other symptoms of thymic hypertrophy (crises of suffocation, permanent dyspnœa).

M. D'Oelsnitz : There are four principal clinical varieties of thymic hypertrophy, the *fulminating*, with sudden death, the *latent*, the *silent*, and the *permanent*. Radiotherapy gave good results.

MM. Nobécourt and Tixier had been able to demonstrate in the healthy child by means of the concentric percussion of Constantin Paul an area of impaired resonance, six or eight centimetres broad, which extends beyond the left border of the sternum and merges into the precordial dulness. This impaired resonance is due to the presence of the thymus or the vascular pedicle.

M. Froelich : The upper strait of the thorax is extraordinarily narrow in certain young subjects, so that the breathing becomes embarrassed as soon as the thymus is, however slightly, enlarged.

M. Hutinel : There is a great tendency to confuse spasm of the glottis and thymic attacks. Hypertrophy of the thymus only plays a subsidiary part in spasm of the glottis by aggravating the symptoms, but sometimes to such an extent as to necessitate intervention. He had a case in which the alarming symptoms ceased after a thymectomy.

M. Barbier agreed with M. Froelich as to the narrowness of the upper thoracic strait. He had seen it reduced to 15 mm. The large vessels in this region were thus equally capable of pressing on the trachea or nerves, and give a radioscopic shadow which is often wrongly attributed to hypertrophy of the thymus.

M. Boissonnas described the case of an infant, aged 2 months, seized with intense dyspnœa and inspiratory stridor. The upper respiratory passages were free, the epiglottis normal. On expiration a round mass was distinctly perceived in the supra-sternal region which disappeared within the thorax at each inspiration. There was dulness over the manubrium to the extent of 4 cm. Radioscopy showed a corresponding shadow. The thymus, weighing 20 grm., was extirpated. The trachea was flattened and softened. Tracheotomy two days later on account of the tracheal lesion. Death eighteen days after the operation from broncho-pneumonia.

Second Discussion.

Bacteriology and Epidemiology of Cerebro-spinal Meningitis, by MM. Richardière and Lemaire.—Weichselbaum's diplococcus, Gram-negative, resembles in many points the gonococcus, but differs from it entirely in its action on the sugars. It alone is possessed of a marked fermentative action on glucose and maltose. Equally important are the results of the reactions of agglutination, precipitation, reaction of fixation, and the process based on the action of bile and biliary salts. There also seem to exist between the meningococcus, the gonococcus and pseudo-meningococci common characters, characters of grouping and specific characters, which give to Weichselbaum's coccus a well-marked individuality. The authors insist on the idea that germs are carried, thus explaining the facts of epidemics and their apparent irregularity. They also insist on the dangers of the specific rhino-pharyngitis with which the subjects of meningitis and the germ-carriers are equally attacked. From these facts it is advisable to isolate these germ-carriers until their harmlessness is ascertained during an epidemic. As causes which favour the development of epidemics may be quoted low temperatures with humidity and thermometric oscillations, fatigue, overwork, and early life.

Cerebro-spinal Meningitis in Children, its Symptoms and Diagnosis, by MM. André Moussous and Rocaz.—The chief symptoms were described, *e. g.* muscular contractures, rigidity of the neck, Kernig's sign, the contra-lateral reflex of Brudzinski, paralysis, sensory troubles, psychic and vaso-motor disturbances. The general symptoms were—fever, digestive disorder, cutaneous and articular manifestations, changes in the urine and blood. The agglutinating power and the opsonic index were important. The clinical forms in children were very various and were relative to the duration of the disease, age of the patient, and absence or predominance of certain symptoms. The authors described various forms, such as acute, sub-acute, fulminating, chronic and relapsing. In the infant they distinguished convulsive, hyperæsthetic, and tetanic forms; there was also posterior basal meningitis; they also discussed ambulatory and abortive forms, more frequently met with in the adult, but also found in children. Complications are met with in the form of vascular and pulmonary lesions, lesions of the nervous centres, nerves, visual and auditory apparatus. Lesions of the nervous centres, eye and ear constitute the most frequent sequelæ of cerebro-spinal meningitis to which children are liable, such as hydrocephalus, blindness, deafness, disturbance of intelligence and motor apparatus. The most important elements for diagnosis are furnished by examination of the cerebro-spinal fluid obtained by lumbar puncture, by the precipito-reaction of Vincent-Bellot, and the fixation reaction of Bordet-Gengou.

The Treatment of Cerebro-spinal Meningitis, by M. Netter.—Intra-spinal injections of anti-meningococcic serum act as a specific. Under their influence the mortality is markedly lessened, the duration of the disease shortened, and the symptoms modified, while complications and sequelæ are more rare. To obtain the best results sufficiently large doses must be used (30 to 60 c.cm.), and repeated during the first three or four days of treatment. The injections must be continued as long as the cerebro-spinal fluid contains meningococci. They must be repeated should a relapse occur. Cures are much more rapid and frequent when treatment is commenced

early. In doubtful cases it is advisable to inject the serum after the first puncture without waiting for the results of bacteriological examination. This examination, on the other hand, is a guide to future injections. In some cases, happily exceptional, twenty or more injections were necessary to bring about a complete cure. The meningitis of infants is more serious and the efficacy of the serum less appreciable. This may possibly be caused by the want of communication between the arachnoid cavity and the cerebral ventricles. In these cases it may be necessary to practice intra-ventricular injections. One recovery seemed to be due to this intervention. The injection of serum may aggravate pains, increase rigidity and fever, and also cause eruptions. Happily more rare, but at the same time more serious, are disturbances of breathing, orthopnœa and apnœa, which are sometimes fatal. They seem due to poisonous principles which form part naturally of horse-serum; they should not prevent us having recourse to sero-therapy. The use of serum does not forbid the employment of other useful measures, such as hot baths, which relieve pain and rigidity, collargol, which diminishes fever, and salicylic preparations.

M. Hutinel had observed fatal results from the injection of serum. They occur principally in tuberculous children.

MM. Broca and Debré drew attention to certain surgical complications, such as appendicitis, acute otitis, metastatic articular troubles, and abscess of the brain.

M. Hallé described a case of mumps which in the early stage resembled cerebro-spinal meningitis.

MM. Netter and Tinel, from an analysis of 58 cases, were of opinion that the meningeal form of acute poliomyelitis was extremely difficult to diagnose from cerebro-spinal meningitis.

M. Mallet had treated an infant, aged 3 months, by fourteen lumbar punctures, using 60 c.cm. of the serum as subcutaneous injections and 90 c.cm. as intra-spinal injections, without being able to prevent death.

M. Leon Tixier said that the diagnosis of cerebro-spinal meningitis from meningeal hæmorrhage was impossible in the absence of lumbar puncture, which showed differences in colour and cytology.

MM. Voisin and Paisseau: The signs of cerebro-spinal meningitis in twenty-five cases were specially characterised by vomiting, Kernig's sign, erythema and herpes. Fever was often absent, and so were convulsions. They had observed multiple paralyses and tremors.

Vincent Dickinson.

Abstracts from Current Literature.

Medicine.

Noma in typhoid fever (*'Med. Record,'* 1910, i, *p.* 39).—**F. P. Kinnicutt** records a case in a girl, aged 11 years, of this very rare complication, which occurred on the thirty-fourth day of disease. The temperature on that day was normal for the first time, but she complained of toothache. A decayed tooth was found with an ulcer at the base. The tooth was extracted, but the ulcer spread over the gum, the sublingual tissues, and inner surface of the cheek, which it finally perforated. Death occurred on the

tenth day after the development of the necrotic process. Agglutinins were entirely absent in the tenth dilution, but opsonins were present as shown by the active phagocytosis, and an opsonic index of 1·3 for staphylococcus. Among the numerous organisms present in the ulcer the staphylococcus, streptococcus, and pseudo-diphtheria bacillus predominated. Stock vaccines of combined staphylococcus and streptococcus were given, and the leucocytes rose from 10,000 to 17,000 with marked increase of the polymorphonuclears, but without any influence on the rapid course of the disease (*cf.* British Journal of Children's Diseases, 1907, *p.* 453).

J. D. Rolleston.

Diphtheria in Philadelphia ('*Med. Record*,' 1910, II, *p.* 65).—**Mary Sallom.**—During the past twelve years 43,997 cases have been reported to the Bureau of Health; 7097 died. The mortality fell from 24·18 per cent. in 1898 to 14·18 per cent. during 1899, 1900, and 1901, and finally to 12 per cent. during 1907, 1908, and 1909. This fall in the mortality is shown to correspond with the increase in the gratuitous supply of antitoxin furnished through the Board of Health.

J. D. Rolleston.

Diphtheria simulating a foreign body in the right bronchus ('*Nederland. Tijdschr. von Geneesk.*,' 1910, I, *p.* 669).—**H. Schols.**—A child, aged $2\frac{1}{2}$ years, was taken ill one evening with symptoms resembling laryngismus stridulus. The dyspnœa ceased before Schols's arrival, but another attack of short duration occurred the next day. On the fourth day of disease the child presented marked stridor and recession. The right side of the chest was motionless during respiration. The throat was clean and the lymph glands were not enlarged. The temperature was normal. The diagnosis of a foreign body in the right bronchus was made, and the child was removed to hospital. On performance of tracheotomy nothing was found, but cultivation of the tracheal mucus showed diphtheria bacilli. Death took place on the day following the operation. The autopsy showed thick membrane in the larynx and bronchi and several small areas of broncho-pneumonia. The symptoms were probably due to obstruction of a bronchus by a piece of membrane. Two days later the brother and sister of the patient were taken ill with definite faucial diphtheria.

J. D. Rolleston.

Fatal laryngo-tracheal diphtheria ('*Rev. de Laryngol.*,' 1910, II, *p.* 82).—**Delobel** was called to see a child, aged 7 years, who had been suffering several days from progressive dyspnœa. The throat being clean, no serum had been given. Delobel at first performed intubation, but the operation produced complete asphyxia necessitating a rapid tracheotomy. A large membranous cast was coughed up through the wound, and complete relief was momentarily obtained, but was followed by sudden asphyxia, which was probably due to escape of part of the cast into the trachea. Delobel thinks that a long pair of Guisez forceps might have led to the extraction of the membrane.

J. D. Rolleston.

Loss of passive immunity to diphtheria following serum disease ('*Riforma Medica*,' xxv, 1909, *p.* 1016).—**C. Francioni** quotes eight cases where this occurred, cases in which, perhaps, owing to an excessive sensitiveness of the organism injected towards the heterogeneous serum, the phenomena of anti-proteic immunity take place so violently as to lead to a diminution or disappearance of the passive immunity conferred by the curative serum

injected, and to place the organism itself in a condition of diminished resistance to the very infection against which the serum was used. This afforded an explanation of relapses running a course which was often more serious and prolonged than the first attack. These phenomena, according to the results of experiments by various authors on animals, are due to the fact that the antitoxin, intimately bound up with the proteids of the serum, participate in their precipitation and coagulation when they occur. In the author's opinion, however, the mechanism is more complicated, since it seems probable that in the reaction subsequent to the formation of the anti-bodies, those means of defence which are spontaneous and not specific also suffer a diminution of potentiality in the organism. Such a diminution of potentiality, defensive and not specific, seems to be confirmed by those clinical observations where serious secondary complications or the aggravation of pre-existing morbid symptoms follow on severe conditions of serum disease. The author thinks that these facts do not constitute any reason against the use of serum as they occur so exceptionally; against one case in which these unfavourable results have occurred must be put hundreds of cases in which serum has led to a rapid cure without any untoward symptoms at all. But on the other hand, these few cases should induce us to regard prophylactic measures as most important in the defence against diphtheria, and it would be a grave mistake if, lulling ourselves with the idea that we possess in anti-diphtheritic serum an infallible remedy against the disease, we should omit all those hygienic measures which prevent its spread. The serum is undoubtedly a precious means in therapy, but it is still more precious in prophylaxis, because used preventively it limits epidemics to their origin, and thus limits the use of it when the epidemic has already spread and attacked many subjects.

VINCENT DICKINSON.

Scarlatina and von Pirquet's reaction (*'Deutsch. med. Wochens.,'* 1910, *p.* 561).—**F. Brandenburg.**—A child, aged 2 years, with signs and symptoms of pulmonary tuberculosis, developed scarlet fever in March. Von Pirquet's reaction was negative then, but was definitely positive two months later. Death from generalised miliary tuberculosis took place in the following September. This case shows that the cuti-reaction may be negative in scarlet fever as well as in measles, in spite of the presence of tuberculosis.

J. D. ROLLESTON.

The liver in scarlet fever (*'C. R. de la Soc. de Biol.,'* 1910, LXVIII, *p.* 232).—**P. Teissier** and **R. Benard** found that involvement of the liver in scarlet fever was most marked in patients in whom this organ had already been affected by some pathological factor, especially alcohol. Apart from such cases, among 3500 scarlet fever cases at the Claude Bernard Hospital from 1905–1908, 278 showed definite evidence of hepatic disturbance. The principal symptoms were increase in size in the liver and tenderness on palpation or percussion. In some both lobes were affected, in others the right lobe was more enlarged than the left. The enlargement as a rule was transient, and disappeared with the subsidence of the acute stage, very rarely re-appearing when later complications developed. The degree of icterus varied from a slight cholæmic tint to well-marked jaundice. The latter was exceptional. In almost every case the colour of the urine and fæces was normal. There was only a slight increase of bile-pigments in the blood. In the urine urobilin was more frequently met with than bile-pigment.

J. D. ROLLESTON.

Anomalous scarlet fever (*'Journ. of Amer. Med. Assoc.,' July* 16, 1910).—**Corlett** and **Cole** report thirty-two cases of scarlet fever, occurring in three epidemics, which presented anomalous features. There were three cases in which the erythema was very slight; in one it was absent, and in another it was confined to small areas and was very evanescent. Two of the patients with slight erythema had it confined to the neck, shoulders, and arms. One had a secondary erythema. The temperature varied from normal to 105° F. Four patients never had a temperature above 99° and two never above 100°. The remainder varied between 100° and 105°, but the majority were between 100° and 102°. In six cases the desquamation was typical, and in one it was faint, but general. One patient showed no desquamation except around the neck and another none except on the right hip. In two it was confined to the face, arms, and shoulders, and three showed no desquamation at all. In only two cases was there absence of all signs of nephritis. All the others showed a faint trace of albumin; in one case there were casts. Two of the three cases showing no desquamation had a faint trace of albumin for a few days. Practically every case had a severe angina, seven of them presenting more or less of a membrane in the throat. The only changes in the blood noted were a marked increase in the number of leucocytes in a few cases, and in a number of instances the differential count showed a high percentage of eosinophiles.

T. R. Whipham.

Rubella (*'Ergebnisse der inn. Med. und Kinderheilk.,'* 1910, v, *p.* 280).—**B. Schick** reviews the literature, and records the results of his own experience in an important monograph. In an epidemic observed by him the incubation period varied from fifteen to twenty-three days. Dissemination took place by direct infection. He did not see any definite cases of indirect infection. The infectivity of the disease ceases with the disappearance of the eruption, so that the patient need be isolated for a week only. Disinfection of clothing and of the room is unnecessary. Tuberculin tests may help in the diagnosis of rubella from measles, but only in tuberculous children. A positive reaction in the eruptive stage is against measles. On the other hand, a negative reaction is no proof of measles, since in the absence of tuberculosis the reaction is negative in rubella also.

J. D. Rolleston.

Hæmorrhagic smallpox (*'Monatschr. f. prakt. Derm.,'* 1910, *Bd.* li, *p.* 274).—**Feinberg.**—A boy, aged 13 years, who had been unsuccessfully vaccinated in his first and tenth years, fell ill with hæmorrhagic smallpox. Death occurred on the fifth day.

J. D. Rolleston.

A fatal case of varicella (*'Zentralbl. f. Kinderheilk.,'* 1910, *p.* 243).—**R. Morichau-Beauchant.**—A healthy child, aged 4 months, bottle-fed, developed varicella. At 2 a.m. the next morning it vomited and had a convulsion. Coma supervened, and death took place at 9 a.m.

J. D. Rolleston.

Hæmorrhagic varicella (*'Thèses de Paris,'* 1909–1910, *No.* 361).—**Mlle. Celnik** distinguishes two forms: (1) Varicella with hæmorrhages confined to the eruption. This runs a mild course, and symptoms are slight or absent. (2) Varicella complicated by (*a*) ecchymoses, (*b*) multiple hæmorrhages. In this form the constitutional disturbance is severe, and the

prognosis is grave. The thesis contains the histories of thirteen cases, including two hitherto unpublished, with four deaths. In one of these a hæmorrhagic vesicular eruption was associated with purpura, and in the other three cases there were hæmorrhages from the nose, conjunctiva, gums, and intestine. A history of hæmophilia was obtained in only one case which recovered. The first of the four fatal cases was tuberculous, the second was suffering from enteritis, in the third case the father was tuberculous and the mother diabetic, and in the fourth case the special virulence of the pathogenic agent was incriminated.

J. D. Rolleston.

Epigastric pain as a complication of mumps (*'Brit. Med. Journ.,'* II, 1910, *p.* 231).—**H. P. Godfrey.**—During an epidemic of mumps six out of twelve patients suffered from epigastric pain and vomiting. These symptoms usually occurred after subsidence of the parotid swelling, sometimes three or four days after. The vomiting usually lasted only two days, but in one case it persisted for five or six. Drug treatment was useless, but relief was obtained by the application of a mustard plaster to the epigastrium. The symptoms were probably due to metastatic affection of the pancreas (*cf.* British Journal of Children's Diseases, 1908, *p.* 267).

J. D. Rolleston.

Prognosis of whooping-cough (*'Thèses de Paris,'* 1909–10, *No.* 404).—**F. Léger.**—Among 171 cases of whooping-cough treated at a Paris dispensary between January 1, 1904, and May 1, 1910, the mortality was 5·2 per cent. The percentage mortality during the first two years of life was 8·4, from two to five years 1·4, and above five years *nil.* These figures compare favourably with the statistics of the Hôpital Bretonneau, where the mortality recently was 20·9 per cent. (*vide* British Journal of Children's Diseases, 1907, *p.* 454). An even lower death-rate was obtained by Variot at the Belleville dispensary (1·0 per cent.) and by Comby at La Villette dispensary (1·5 per cent.). Death was almost always due to broncho-pneumonia, which occurred in one sixth of the cases. The association of measles with whooping-cough, not infrequent in hospitals, was noticed only once in fourteen years out of a total of 474 cases of whooping-cough attending at the dispensary. Tuberculosis occurred in the course of, or as a sequel to, whooping-cough in 8·2 per cent. Congenital syphilis did not appear to have any influence on the duration or gravity of whooping-cough.

J. D. Rolleston.

Difficulties in the diagnosis of yellow fever among children (*'Brazil Medico,' February* 22, 1910).—**Moncorvo Filho** says the diseases that have to be differentiated are influenza, malaria, exanthemata, typhoid fever, and the acute intestinal affections. The symptoms of headache, backache, myalgia, etc., cannot be ascertained in a child, while such symptoms as vomiting, fever, delirium, and icterus are common to all these diseases. Diagnosis has to rest upon the suddenness of the rapid development of such symptoms as black vomit, albuminuria, and hæmorrhages. Malaria is often very abnormal in children, whilst the presence of Laveran's parasite does not always exclude yellow fever, which may exist in children who have had malaria. Diphtheria caused much difficulty in a child aged 3 years, whose two brothers were suffering from yellow fever. The initial symptoms were severe, and it was not till on the fourth day, when symptoms pointed to the throat, that the correct diagnosis was made. Plague caused much difficulty

in two or three cases, as did also a case of *icterus gravis* in a child aged 5 years. M. D. Eder.

Persistence of meningococci in cerebro-spinal meningitis (*'Centralbl. f. Innere Med.,'* 1910, *p.* 978).—**Beck** records a case in a girl, aged $1\frac{1}{4}$ years, in whose cerebro-spinal fluid meningococci were found at the necropsy after an illness of thirteen weeks. J. D. Rolleston.

Obesity in children (*'Berlin. klin. Woch.,'* *p.* 1414, 1910).—**Stern** describes two distinct forms of the disease; he considers that form which is characterised by the formation of fat at puberty an anomaly of metabolism, and the other form an obesity peculiar to young persons which usually disappears at the end of growth; he finds this specific form more often in girls, the deposit of fat being greatest on the breasts and the extremities; the metabolic form occurs oftener in boys, and affects chiefly the abdomen, the hips, and the buttocks; yet either form may occur in both sexes. The obesity of altered metabolism in children and young adults can occasionally result from congenital or acquired constitutional anomalies, giving rise to the impression that there is a predisposition to obesity, but in the greater number of cases there is no transmitted tendency or adipose diathesis; the obesity must be attributed to the circumstances that the members of the family lead the same life, that is, are overfed, or indolent, or both. Overfeeding has no part in specific obesity; on the contrary there is often loss of appetite and capricious desire for food. While the obesity of altered metabolism may last for a time or throughout life, the obesity of youth is a specific state, limited to this period, though it may recur at the time of the climacteric; as the cause is not found in overfeeding, there must be diminished oxidation. The following considerations suggest that a disturbed function of the thyroid or parathyroid, or both, is probable: (1) the reduction in size of the thymus and the pronounced development of the thyroid at puberty; (2) the greater frequency of affections of the thyroid in girls; (3) the increased oxidation which results from administration of thyroid substance or thyroid gland preparations, as is established by physiological and clinical experience. Either form of obesity requires treatment when it is so considerable that the organs of the body are hindered in function, or when some complication occurs. In uncomplicated cases with less than 30 per cent. excess in weight it is better to omit treatment, as it may be followed by more or less pronounced interference with development. When, however, the obesity of altered metabolism has made its appearance in youth in other members of the family, or when it is recognised soon after its commencement, its increase can be prevented by proper dietetic treatment or its essential progress materially reduced. It must be remembered that the caloric value of food must be somewhat higher in children, because (1) a considerable reduction of food in growing children cannot usually be continued without harm; (2) obesity in the young, as a rule, allows of physical exercise; (3) the percentage of excess of weight is in most cases less than in the similar obesity in adults. With respect to the treatment of specific obesity, dietetic treatment is not merely useless, but detrimental to the young organism. Therapeutics in such cases must be directed against accompanying complications rather than removal of the obesity itself. When the condition is excessive it can be treated by thyroid preparations, especially when symptoms of myxœdema show themselves. In such cases the following tablets have given the best results: Cacodylate of sodium $\frac{1}{4}$ gr., adonidin $\frac{1}{10}$ gr.,

dried powder of thyroid gland 2 gr., three times a day. The arsenic and adonidin are added to check any injurious secondary effect of thyroid medication. J. E. Bullock.

Obesity in children (*'Le Monde Méd.,'* 1910, *p.* 145).—**Prof. Hutinel.**—Obesity must be regarded as closely associated with disturbance of nutrition, and the obese as subjects whose disturbed health calls for treatment. It is not rare in children. Most commonly it is at seven or eight that the child begins to grow fat, and the obesity attains its maximum at puberty. According to Bouchard, obesity is due to slowing down of metabolism under the influence of an organic lesion, such as pancreatic disease, and defective oxidation has also been invoked as a cause. Changes in the genital organs are also important in this respect, so that Carnot described an obesity of puberty, a nuptial obesity, and a climacteric obesity. Lannois has described recently great obesity following ovariotomy, and has also remarked changes in the pituitary body. The thyroid also exerts a pronounced influence, for slight hypothyroidia is accompanied by more or less adiposis. Froelich and others have called attention to the presence of changes in the pituitary body in obese subjects, and in some instances acromegaly is coincident. Even the pineal gland seems to have some influence on obesity. External agents may be causative, such as, repeated injections of anti-diphtheritic serum, tuberculosis, the abuse of alcohol, and the action of strychnine, phosphorus, arsenic, and lead. Out of ten obese children, eight at least are born of diabetic parents. Besides diet, there is room for opo-therapeutic treatment, employing thyroid, and possibly also pituitary extract and extract of the genital glands, etc., avoiding adrenalin. Frederick Langmead.

Obesity in children (*'Gaz. des Hôp.,'* 1910, *p.* 1431).—**L. Babonneix** and **G. Paisseau** record six cases in children whose ages ranged from nine to fourteen years to illustrate the condition named by Launois *syndrome hypophysaire adiposo-génital*, the cardinal symptoms of which are generalised adiposity, genital dystrophy, and symptoms of a pituitary tumour. In five of the cases the X rays showed enlargement of the sella turcica. In all but two the intelligence was below normal. J. D. Rolleston.

Fat and epilepsy (*'Wien. klin. Rundschau,' January* 23, 1910).—**Neurath** showed a "Fettkind," aged 11 years, suffering from epilepsy. At two the fits were eclamptic, and since two and a half years typically epileptic. Weight 45 kilos. (99 lb.), height 135 cm. (63¼ in.). The fatty development was certainly due to some disturbance of one of the glands with internal secretion. Thyroidin was being used. M. D. Eder.

Congenital adiposity (*'Allg. Wien. Med. Zeit.,' August* 16, 1910).—**Neurath** described a boy, aged 6 years, 118 cm. in length, and weighing 31·2 kilos. Intellect was normal. The lower part of the body was covered with cushions of fat; the breasts were huge. There was slight genu valgum and secondary flat-foot. The testicles were curiously small. There were no symptoms pointing to a tumour of the pineal body or hypophysis. He considered that there was some failure in the development of the cells which control the internal secretion of the testicle. M. D. Eder.

An auscultatory phenomenon met in infants and children (*'Journ. of Amer. Med. Assoc.,' May* 21, 1910).—**Lowenburg** directs attention to the fact that normally the inspiratory murmur over the left side of

the chest, especially at the back, in infants and children is decidedly louder and harsher than over the right side; or reversely, the inspiratory murmur over the right side is weaker and less harsh than over the left. The difference may possibly be due to the anatomical differences in the two lungs. The sign has an important bearing in the diagnosis of pulmonary conditions; thus, absence of the sign on the left side usually means the presence of fluid in the left pleura. At the same time the diagnosis of fluid on the right side is rendered more difficult by reason of this sign and the same is the case with the diagnosis of consolidation on the left. Unless this sign is taken into consideration, a diagnosis of pneumonia on the left is apt to be made when other conditions are the cause of fever. Consolidation should be suspected on the right side when the inspiratory murmur is equal in harshness and intensity to that which is normal for the left. An equality of the breath-sounds on the two sides, *i. e.* those on the left being weaker than normal, usually indicates fluid in the left pleura.

T. R. Whipham.

Bronchial asthma in children (*'Zentralbl. f. Kinderheilk.,'* 1910, *p.* 339).—**G. Neumann** records eight cases in children of both sexes whose ages ranged from five to twelve years. The family history was negative; adenoids were present in some but not in all, and none showed any thoracic deformity. On the other hand all the cases showed more or less evidence of the exudative diathesis (*v.* British Journal of Children's Diseases, 1908, *p.* 219). The symptoms were the same as in the adult, but the course appeared to be more favourable, for in observations extending over two or three years spontaneous remissions were observed, which suggested the possibility of permanent recovery. In addition to the drugs usually given in asthma the diet suitable for the exudative diathesis was ordered, but did not prove remarkably successful. J. D. Rolleston.

Pneumothorax (*'Arch. of Pediat.,'* xxvii, 1910, *p.* 179).—**F. Huber** and **I. S. Hirsch** think that pneumothorax is not a rare affection in children. In this important contribution, in which the whole subject of pneumothorax is carefully discussed, special attention is drawn to the value of Röntgen ray examination. In the first place the X rays show the degree of pneumothorax. When the air occupies every part of the pleural cavity the whole side of the chest is brilliantly illuminated, while if the air is localised, only the circumscribed area will present this appearance. The illuminated area contrasts with the mobile shadow against the spinal column which represents the more or less collapsed lung. The only appearance which may simulate a localised pneumothorax is a cavity in the lung, but in the latter condition the contrast between normal and abnormal tissue is not so marked, and the lighter area indicating the lung cavity is surrounded by a dense tissue corresponding to the cavity wall. The X rays also indicate the condition of the lung, its position and mobility, the condition of the pleura, the position and movements of the diaphragm, the position of the heart, and the condition of the chest-wall, in which fractures may be present. J. D. Rolleston.

Generalised emphysema of pulmonary origin in non-tuberculous children (*'l'Echo Méd. du Nord,' July*, 1910).—**Deléarde** and **Paquet** record the case of a girl, aged 6 years, who was admitted into hospital suffering from diphtheria, which cleared up under treatment by antitoxin. Ten days later quite suddenly cough commenced, with pain in the first inter-

costal space on the right side during coughing. The temperature rose and signs of bronchitis appeared in both lungs. Subcutaneous emphysema was found beneath the right clavicle and over the upper part of the thorax behind; this rapidly extended; dyspnœa increased. Five days later the emphysema had spread all over the trunk and down the arm. The child became more dyspnœic, cyanosed, and the temperature subnormal. There was retraction of the head and rigidity of the flexed limbs. The next day the child died. No autopsy was allowed. The authors consider the emphysema was due to the rupture of emphysematous alveoli into the lung tissue and the extension of the air along the connective tissue to the trachea. It is curious that this type is most common in children under the age of seven years; this is probably due to the frequency of acute respiratory maladies at this age. The condition is not always fatal, thirty-nine cases out of eighty-five collected having recovered. The indications for treatment are—first, to lessen the increased intra-pulmonary tension by treating the cough; and second, to keep up the strength of the heart by stimulants such as injections of camphorated oil, strychnine etc.

J. Porter Parkinson.

Some abnormal pneumonias (*'Wien. klin. Rundschau,' January* 23, 1910).—**Escherich** demonstrated some unusual cases in children. (1) A child was taken suddenly ill with pneumonia. After the termination of the short illness the temperature during thirty-eight days fluctuated between 35·2°–40·8° C. There was nothing in the lungs, and in the fever-free intervals the child was quite well; the fever ended by crisis. Anti-streptococcic serum and hydrotherapy had no effect; injections of electrargol increased the fever-free intervals. (2) At the termination of a pneumonia the temperature rose and dulness was found in right axilla with dry pleuritic friction. On the right side, besides the heart shadow a shadow was found with dulness over it; puncture gave thick pus. Two ribs were resected; the pleura was normal; the lung was incised and an interlobular empyema cleared out. (3) A child, aged 2½ years, had an attack. On the fifteenth day pneumonic crepitus was still heard; there was marked asthenia with somnolence, feeble heart, apathy, and aphonia, with fibrinous exudation in the larynx. When the pneumonic signs had ceased the somnolence and apathy remained with spasmodic movements which followed, slowly succeeded by ataxy. There was a severe toxic affection of the brain.

M. D. Eder.

Pneumonias of one, two, and three days' duration in children (*'Med. Record,'* 1, 1910, *p.* 701).—**Le Grand Kerr,** in discussing the occurrence of short attacks of pneumonia in children, takes the following points as diagnostic of the nature of the illness: (1) A sudden onset, with immediate and sustained high temperature, and a dry, hot skin; (2) early prostration to the extent that the child will give up and show visible signs of his illness; (3) markedly increased respirations, with a decided disturbance between pulse and respirations; (4) the exclusion of all other possible causes for the symptoms. As corroborative evidence he instances some additional points: (1) Definite physical signs in the chest; (2) initial vomiting; (3) chill or something which approximates it; (4) primary paleness of the face, with subsequent unilateral flushing. On this basis the author describes cases in which the febrile periods lasted twenty-four, forty-eight, and seventy-two hours.

Reginald Miller.

Protracted pyrexia in pneumonia in children (*'Clin. Journ.,' September* 14, 1910, *p.* 362).—**Reginald Miller.**—In children with pneumonia difficulties may arise owing to the protracted course of the case, more particularly with regard to the exclusion of tuberculosis. As little has been written on such protracted cases, taken collectively, the cases of pneumonia which occurred in the Paddington Green Children's Hospital in five years were collected and analysed. Two hundred and seventeen cases were found in which the length of the febrile period could be stated with accuracy. Such cases as complicated the exanthems were excluded. In fifty-five of these (25·3 per cent.) the fever showed no definite decline by the end of the tenth day, and they were classified as "protracted." Such a high proportion was probably due to the fact that the longer the attack, the more likely is the child to be sent to hospital. The proportions of the protracted cases in primary and secondary (post-bronchitic) pneumonias were 26 and 24 per cent. respectively. The death-rate in unprotracted cases was 9·87 per cent., in protracted, 30·9 per cent. The protracted cases could be divided into five clinical groups: (1) Protracted simple non-spreading pneumonia. In this group the death-rate was four times as great as in the unprotracted cases. (2) Protracted spreading pneumonia, in which one, two, or three fresh areas of pneumonia developed, sometimes with delayed physical signs. The death-rate here was about three times as great as in unprotracted cases. (3) Protracted pyrexia associated with imperfect resolution. In some of these the physical signs suggested a layer of pyo-lymph on the pleura from which toxic absorption took place, accompanied by a swinging temperature. (4) Bacterial complications other than pneumonic. Although such conditions as empyema, pyo-pericardium, otitis media, peritonitis and others were here included, only eight cases out of the fifty-five fell into this group, showing that death in such conditions usually occurs before the tenth day, or that symptoms of these complications do not arise until the pneumonic temperature has subsided. (5) Toxæmic complications, such as the enteritis occurring in the secondary pneumonias of infants.

AUTHOR'S ABSTRACT.

Tubercular vomica in an infant, aged 3 months (*'Lyon Méd.,' August*, 1910, *No.* 35, *p.* 317).—**MM. Collet** and **Delachanel** showed specimens from the case of an infant, aged 3 months, who was admitted into hospital for an acute pulmonary condition characterised by intense dyspnœa, paroxysms of cough, vomiting, and fever. He had been brought up on the breast and sterilised milk. There was a distinct history of paternal tuberculosis. Skin reaction to tuberculin was positive, spleen enlarged, progressive emaciation. Death took place from meningitis. The autopsy revealed the existence of a pulmonary cavity occupying the whole of the right upper lobe, and a smaller one at the posterior aspect of the lower lobe of the same side. The upper portion was caseous. The bronchial glands on the right side were caseous, but not on the left. The left lung had only miliary tubercles. There was tuberculous meningitis, and a few miliary tubercles in the liver, spleen, kidneys, and peritoneum. No intestinal ulceration; the mesenteric glands were not caseous.

VINCENT DICKINSON.

Lympho-sarcoma of the anterior mediastinum (*'Wien. klin. Rundschau,' February* 20, 1910).—**Monti** demonstrated a girl, aged 14 years. The skin of the thorax was pierced by dilated veins; the left side was vaulted. There was dulness on the left front, which below merged into the heart

dulness and extended to the axilla and the angle of the scapula. Over the dulness there was suppressed breathing with a few rhonchi. There was painful cough, with much sputum. X rays showed a shadow over the left lung, most intense in the upper half. M. D. Eder.

Meningism complicating nasal and buccal diphtheria without false membranes; cure after injection of antitoxic serum (*'Gaz. Hebd. des Sci. Med. de Bord.,'* 1910, p. 207).—**Bitot** and **Petges.**—In 1892 Babinski described symptoms resembling tetanus due to the diphtheria bacillus, and Moussous has also described other cases attended by chronic convulsions, trismus, generalised convulsions of a tetanic character, etc. The present case was in a coachman, aged 43 years, who was seized with violent headache on the evening of March 15. There was neither dysphagia, cough, coryza, nor fever. The headache persisted for four or five days, to reappear on March 23, accompanied by pain and stiffness of the neck and shivering; photophobia was present. On March 27 the following features were noted: Severe headache, great stiffness and pain in the neck. Stiffness of the whole spinal column. Slight Kernig's sign; photophobia. There were no paralyses or other contractures. Throat normal; no enlargement of cervical or other glands. Cough, blood-stained expectoration containing numerous pneumococci. Some signs of consolidation of bases of lungs. Temperature normal. He remained in this state for three days, when lumbar puncture was done. The fluid was under increased tension, limpid, and the cellular elements were normal. Cultures from the buccal and nasal mucus contained diphtheria bacilli with staphylococci and streptococci. On April 1, 20 c.c. of Roux's serum was injected, followed by rapid improvement of all the symptoms. This case shows the value of examining the mucus from the nose, pharynx, etc., in obscure cases attended by nervous symptoms.

J. Porter Parkinson.

Paratyphoid meningitis (*'La Prensa Medica,'* 1910, *p.* 52).—**C. Inclán.**—A Cuban boy, aged 4 years, at the end of the first fortnight of a disease resembling typhoid, in which Widal's reaction was negative, developed all the signs of meningitis. Lumbar puncture gave issue to a slightly turbid fluid under hypertension containing abundant polymorphonuclears. Cultures of the fluid yielded an organism closely resembling Schottmüller's paratyphoid B bacillus, which was agglutinated by the patient's serum in dilutions of 1 in 40, 1 in 50, and 1 in 100. Improvement followed the operation, and after two more punctures the meningeal symptoms completely disappeared. Some days later, however, the temperature rose again to 104° F., and the meningeal symptoms returned in an aggravated form. The cerebro-spinal fluid was now found to be purulent, and to contain numerous polymorphs and organisms resembling those found at the first puncture. Death took place on the seventy-fourth day of disease. No autopsy. No other instances of meningitis complicating paratyphoid have been recorded. J. D. Rolleston.

Infantile quadriplegia with pneumococcal infection of meninges; absence of leucocytic reaction (*'Ann. de Méd. et Chir. Inf.,'* 1909, *p.* 109).—**MM. E. Gaujoux** and **F. Maillet** report the case of a child, aged 10 years, who was seized with vomiting, fever, convulsions, and slight cough; paralysis of the limbs occurred next day, and the case seemed one of acute infantile paralysis. Lumbar puncture drew off a limpid fluid under con-

siderable tension. There was no leucocytic reaction (neither mono- nor poly-), but a large number of pneumococci, so that the preparation had the appearance of a pure culture of this microbe. The authors discuss the question whether the symptoms were due to a pathological process, at first extensively involving the meninges and not localised in the anterior horns of the grey matter. They draw attention to the necessity of making microscopic examination of the last drops of the tube of centrifugalised fluid. Chemical examination by M. Mestrezat revealed a notable quantity of albumin (0·40). The remainder of the formula was normal. VINCENT DICKINSON.

Meningitis complicating pneumonia (*'Arch. of Pediat.,'* 1910, XXVII, *p.* 355).—**A. Hymanson** records three fatal cases in children, aged 11 months, 18 months, and 2½ years respectively. The cerebro-spinal fluid was turbid or purulent, and showed the pneumococcus in two cases and the pneumo-bacillus in the third. A review of the literature is appended.
J. D. ROLLESTON.

Acute meningitis in a congenital syphilitic; recovery (*'La Clin. Infant.,' June*, 1910, *No.* 11, *p.* 330).—**J. Billet** reports the case of a boy, aged 11 years, who, after a mild attack of measles, was seized with acute cerebral symptoms. Lumbar puncture gave a clear liquid, and was followed by improvement for about twelve hours. As the father had suffered from a gumma four years previously, mercurial inunctions were ordered and iodide of potash by mouth. The symptoms subsided slowly. A second lumbar puncture was performed; the liquid was sterile and without any deposit after prolonged centrifugation. Wassermann's reaction was positive. Clinically the case resembled one of tubercular meningitis; on the other hand, there was the absence of cellular reaction in the cerebro-spinal fluid.
VINCENT DICKINSON.

Blood-pressure in meningitis (*'Ann. de Méd. et Chir. inf.,'* 1910, *p.* 196).—**J. Parisot.**—With the exception of tuberculous meningitis, in which the blood-pressure, as is the rule in tuberculosis, remains at or below the normal, the blood-pressure in meningitis shows a well-marked rise followed by return to the normal in cases which recover, and by increasing hypotension in fatal cases. Parisot has found clinically and experimentally that rise in the pressure of the cerebro-spinal fluid entails arterial hypertension, which sinks or disappears when the cerebro-spinal tension falls and becomes normal. He therefore recommends lumbar puncture as a therapeutical measure in meningitis whenever there is a marked rise of blood-pressure accompanied by signs of cerebro-spinal hypertension. J. D. ROLLESTON.

A case of juvenile general paralysis (*'Med. Record,'* II, 1910, *p.* 404).—**James V. May** gives a full account of a case which was under constant observation for the last sixteen months of life. The patient, a boy, aged 16 years, with a neuropathic family history, was unusually intelligent up to the age of fourteen years. Following a blow on the head at this age he became mentally dull, and developed indistinctness of speech and unsteadiness of gait. Athetoid movements of the hands formed an interesting and persistent symptom. The patient showed Hutchinsonian teeth, and in the eyes patches of old choroiditis. His physical signs suggested the tabetic form of general paralysis. The cerebro-spinal fluid did not show any lymphocytosis at an early date, although such was present post mortem. The disease ran

a course of slightly over two years, and at the end rigidity and contractures developed. Death occurred from pneumonia. The findings at the autopsy confirmed the clinical diagnosis. REGINALD MILLER.

Cerebral softening in acquired heart disease in children (*'Thèses de Paris,'* 1909-10, *No.* 108).—**R. Baussay** has collected 34 cases in children whose ages ranged from 2½ to 16 years; 18 were boys and 16 girls. The softening was due to embolism following endocarditis, which was secondary in 10 cases to rheumatism, in 4 to chorea, in 3 to diphtheria, in 2 to scarlet fever, in 1 to typhoid, and in 1 to erythema nodosum. Twenty-eight died, on twenty-five of whom a necropsy was held. The left Sylvian artery was the vessel most frequently involved. J. D. ROLLESTON.

Post-scarlatinal hemiplegia (*'Neurol. Centralblatt,'* 1910, *p.* 763).—**A. de la Chapelle.**—A boy, aged 7 years, suddenly developed left hemiplegia in the sixth week of an attack of scarlet fever complicated by nephritis and pneumonia. Death took place thirteen days later. The autopsy showed an embolus in the right Sylvian artery. J. D. ROLLESTON.

Convulsions in whooping-cough (*'Med. Klin.,' June* 5, 1910).—**Ibrahim** found that a cerebral tumour was the cause of convulsions in one case of whooping-cough, and that in two others the use of packs to induce sweating aggravated the condition. Such measures, therefore, should not be used in such cases. In all cases of whooping-cough with convulsions the diet should be regulated by excluding cow's milk, and giving phosphorus in cod-liver oil, and lumbar puncture should be performed in severe cases. Eckert has recently reported four cases in which lumbar puncture apparently conduced to recovery. T. R. WHIPHAM.

Ætiology of tetany (*'Monatschr. f. Kinderheilk.,' April*, 1910).—**Quest** maintains that a lack of lime is the chief factor in the ætiology of tetany, and that this may be the result of various causes. It is, however, principally due to an unsuitable diet, an excess or imperfect assimilation of the fat in milk causing the fat to combine with the lime, which is thus eliminated, independently of the amount ingested. An exclusive carbohydrate diet, on the other hand, may fail to supply an adequate proportion in the food. The beneficial effect of phosphorus and cod-liver oil is due to its favouring the retention of lime-salts rather than to any anti-spasmodic action. The injection of lime-salts may possibly be useful in cases showing a chronic tendency to tetany. T. R. WHIPHAM.

Lime metabolism in tetany (*Monatschr. f. Kinderheilk.,' April*, 1910).—**Schabad** reports his researches on the lime metabolism during and between the periods of marked tetany, and confirms the opinion that phosphorus and cod-liver oil are beneficial both on the spasm and in rickets, both improving together when they are associated. T. R. WHIPHAM.

Amyotonia congenita (*'Journ. of Amer. Med. Assoc.,' July* 30, 1910).—**Skoog** reports a case of this disease in a girl, aged 22 months, from whom a small piece of gastrocnemius muscle was removed under local anæsthesia for microscopical examination. The part immediately beneath the muscle-sheath showed an absence of muscle-bundles, all being replaced by fatty tissue. A deeper section contained some pale muscular tissue and much fat. There was great nuclear proliferation, the nuclei of the sarcolemma being

four or five times more numerous than normal. The blood-vessels, including the capillaries, had greatly thickened walls, the adventitia showing the greatest amount of increase, while the intima was not involved.

T. R. Whipham.

Von Graefe's sign in myotonia congenita (*'Amer. Journ. of the Med. Sciences,' July*, 1910).—**Sedgwick** records the history of a family in which von Graefe's sign was present in five generations. Of the twenty-nine members recorded thirteen were affected with myotonia and sixteen were free. All of those affected showed von Graefe's sign to a greater or less degree; seven were males and six females. In the first generation the paternal grandmother, in the second the father and father's brother were affected. In the third generation one brother and one sister were affected, while a brother and a sister were free. The myotonic brother transmitted the disease by two wives to four out of five children, while the unaffected brother and sister did not transmit it. T. R. Whipham.

Facial hemiatrophy in a child (*'Med. Record,'* 1910, II, *p.* 39, *Practit. Soc. of New York*).—**M. Allan Starr** showed photographs of a child, aged 8 years, in whom the disease began at six after whooping-cough. The atrophy involved the whole right side of the face from the supra-orbital ridge to the lower border of the inferior maxilla. The disease is not uncommon in young adults, but no previous cases had occurred at so early an age. J. D. Rolleston.

A case of salaam convulsions (*'Med. Record,'* I, 1910, *p.* 769).—**S. A. Agatson** describes a very typical case of this disorder. The patient, the male child of first cousins, first showed symptoms at the age of fourteen months. The attacks occurred eight to ten times a day, usually after sleep. Each attack consisted of twenty or thirty spasms lasting about twenty seconds and occurring at quarter- or half-minute intervals. In them there was momentary loss of consciousness. The head was bowed suddenly and without premonition, until the chin touched the sternum. Simultaneously the trunk was inclined to an angle of about 60°. The right arm was raised to the level of the shoulder with the palm directed downwards and inwards. At the age of four years the boy had been under observation for eighteen months without improvement. Reginald Miller.

Ophthalmology.

Some eye troubles of early life (*'Med. Record,' January* 15, 1910, *p.* 101).—**John Waite Avery** briefly discusses the refractive and muscular disturbances of the eye from infancy to youth, and he points out the significance of various symptoms. These conditions may give no special trouble, or even become apparent, until the strain on accommodation begins when the child starts school. Headaches are a common symptom of eye-strain, and disorders of the lids and conjunctiva are not unusual. Remote reflex disturbances, such as nervous, gastric, and intestinal troubles, may have the same origin. The fact of error of refraction, and its amount, may not appear without a cycloplegic. All such refractive and muscular imperfections should receive prompt attention. The author believes that squint should not be operated on before a long trial with glasses has been made. It is reasonable to suppose that the time to begin this treatment (with glasses) is while the

squint is still intermittent or "periodic," and before the sight has been damaged. In carrying out refraction work in children, atropine sulphate is the most reliable cycloplegic to employ. J. Allan.

Cryptophthalmia (*'Journ. of Amer. Med. Assoc.,' July* 30, 1910).—**Coover** reports two cases of cryptophthalmia or total congenital ankyloblepharon and symblepharon accompanied by abnormality of the eyeballs. The first is a woman, aged 24 years, who was born with the upper and lower lids of both eyes firmly united. There is an indication of a palpebral fissure and in the centre are two rows of hairs. When two years of age the left eye was opened by a surgeon and an imperfectly developed eyeball was found: four years later the right eye was opened and a small globe was found embedded in a mass of connective tissue towards the nasal side of the orbit. No corneal tissue could be seen. There was no history of consanguinity. The patient married a man who had lost his eyes in a mine explosion, and their baby, the second case, is a duplicate of the mother. This child, aged 7 months, presents apparently a modified conjunctiva at the junction of the two lids and a few cilia with a partially formed caruncle in each eye. A small eyeball is present in each orbit. T. R. Whipham.

Congenital blennorrhœa of the lacrimal sac (*'Ophthalmic Review,' September,* 1910, *p.* 262).—**John Foster** believes that in certain cases this condition may be cured by the expression treatment, which may be briefly described as consisting of frequent emptyings of the sac by pressing that structure against the lacrimal bone, coupled with the employment of zinc chloride or other astringent drops to the conjunctiva afterwards. Silver nitrate (gr. ij to the ounce) or 1 per cent. protargol may be occasionally painted on the everted conjunctiva if thought necessary. If this treatment be properly carried out there should, in his opinion, be no necessity for operative interference, involving slitting of the canaliculus and passage of the probe. Notes on two cases are appended. J. Allan.

The ophthalmia of the newborn, its causation, prevention, and treatment (*'Med. Record,' July* 30, 1910, *p.* 211).—**Elbert S. Sherman.**—About 65 per cent. of the cases are caused by the gonococcus, 10 per cent. by the pneumococcus, 10 per cent. by other pathogenic organisms, and 15 per cent. are negative bacteriologically. Contamination of the eyelids occurs during the passage of the child through the vagina, but actual infection of the eyes takes place after birth, for, in the majority of cases, the lids at birth are closed and sealed. Simple, careful methods of prophylaxis give results almost as good as the best results of the Credé method, which is of great value if properly carried out. In the large majority of cases in private practice, and always in hospitals, drops should be used in the eyes soon after birth: 1 per cent. silver nitrate solution is the proper prophylactic agent. Secondary infections by means of contaminated towels, bed-linen, dirty fingers, etc., must be guarded against. At the first bath separate water should be used for the face, and care taken to prevent any bath water entering the eyes. Infections frequently occur during the first bath. With early treatment prognosis is good, but it requires much faithfulness on the part of the attendants, and should be supervised by one skilled in the treatment of diseases of the eye. J. Allan.

Hypernephroma tumours of both optic nerves and hydrocephalus with obesity and signs of precocious development (*'The Ophthalmo-*

scope,' 1910, *p.* 562).—**Leonard Guthrie** and **W. D'Este Emery** record a case in a girl, aged 4 years, hydrocephalic since birth, and almost blind from advanced primary optic atrophy. In appearance she resembled a short, stout girl at the age of puberty. The breasts, however, were not enlarged, and there was no local or general hirsuties. Death followed puncture of the lateral ventricle made to relieve the increasing intra-cranial pressure. Autopsy: the site of the left supra-renal was occupied by a tumour, fibromatous or fibro-sarcomatous in structure, and containing a few giant cells. Examination of the brain showed advanced internal hydrocephalus. A symmetrical tumour occupied the position of the optic chiasma, and extended forwards along the optic nerves to each optic foramen, backwards into the crura, and outwards into the region of the Sylvian fissure. In structure it resembled a glioma, but it also contained some giant cells similar to those found in the adrenal tumour. The ovaries were relatively large. The other organs were normal. J. D. Rolleston.

Pseudo-membranous streptococcal conjunctivitis (*'Thèses de Paris,'* 1909–10, *No.* 375).—**T. T. David.**—This is a rare affection, and almost the exclusive appanage of children. It is rarely primary, but usually occurs in the course of an infectious disease, or coincides with a naso-lacrymal or palpebral lesion, or an affection of the neighbouring skin, such as impetigo, eczema, or erysipelas. Its gravity equals, if it does not exceed, that of diphtheritic conjunctivitis, from which it cannot be distinguished clinically but only by bacteriological examination. The streptococcus may be associated with other organisms such as the staphylococcus or diphtheria bacillus, but the aggravation of the disease which is the rule in such cases is probably due to an excessive virulence of the streptococcus. Treatment should consist in irrigation and disinfection of the conjunctivæ. Anti-streptococcic serum should be employed, and silver nitrate avoided. The thesis contains the histories of nine cases, including a personal one, in children aged from eight months to six years. Two cases were suffering from scarlet fever, two from measles, and one from influenza. J. D. Rolleston.

An unusual case of diphtheria of the conjunctiva and cornea (*'The Ophthalmoscope,'* 1910, *p.* 563).—**Sydney Stephenson** gives notes of a case of conjunctival diphtheria affecting a boy, aged 6 years. The peculiarity of the case was that the stress of the morbid change fell upon the ocular conjunctiva and the cornea, and not, as is usual, upon the palpebral conjunctiva. The face was covered with impetiginous sores, and thick pus poured from the nostrils. The child seemed very ill. The eyelids were not markedly thickened, and they could be everted, although not without some little difficulty. The ocular conjunctiva and the cornea of both eyes were covered with adherent membrane, of ashen-grey colour, so that the entire anterior part of the eye, including the cornea, presented a whitish-grey appearance, almost as though the parts had been cauterised. There was no pronounced enlargement of the pre-auricular glands. There were patches of membrane in the throat, especially on the right side. In smears taken from the conjunctiva were found (1) numerous and typical Klebs-Loeffler bacilli and (2) streptococci. The same organisms were found in culture. Antitoxin was injected twice in large doses, and under this treatment the condition quickly cleared up. J. Allan.

Panophthalmitis and meningitis in scarlet fever (*'Monatschr. f. prakt. Derm.,'* 1910, *Bd.* LI, *p.* 270).—**G. Leoz.**—A boy, aged 8 years, had an

attack of scarlet fever, which during the first ten days ran a mild course. Two or three days after the temperature had become normal he suddenly complained of severe pain in the left eye, and the temperature rose to 102·2° F. The eyeball became enlarged, the conjunctiva and lids injected and œdematous, the cornea hazy, and the lens was driven into the anterior chamber. The ophthalmoscope showed pus in the vitreous, indicating suppurative choroiditis. Enucleation was refused, and death took place two days later from meningitis. J. D. Rolleston.

Phlyctenular disease and tuberculosis (*'Brit. Med. Journ.,'* 1910, I, *p.* 916).—**Sydney Stephenson** and **J. A. Jamieson** used von Pirquet's test in twenty children aged from two to twelve years who were suffering from various forms of phlyctenular disease, and obtained a positive result in every case. About 50 per cent. showed more or less obvious signs of medical and surgical tuberculosis, and 75 per cent. gave a family history of tubercle. **H. Haward Bywater** (*'Ophthalmoscope,'* 1910, *pp.* 414 and 492) subjected twelve cases of phlyctenular disease in children aged from three to fourteen years to Moro's percutaneous inunction test and obtained a positive result in all, two giving a mild, nine a moderate, and one a strong reaction. Six had a family history of pulmonary tuberculosis. None showed any evidence of phthisis, but eight showed other signs of tuberculosis, such as enlarged cervical, axillary, or mesenteric glands. In fifteen cases, in which these twelve were included, the percutaneous test with bovine tuberculin was used. All gave a positive reaction, which in twelve was somewhat greater than with human tuberculin. In thirteen cases von Pirquet's test with bovine tuberculin was used, in every case with a positive result.

J. D. Rolleston.

A clinical study of obsolescent tuberculous choroiditis of the macular region of children (*'The Ophthalmoscope,'* 1910, p. 409).—**T. Harrison Butler** believes that this condition is more common than is usually supposed. The affected child is of a decidedly tuberculous type, generally refined looking, and highly intelligent. The skin is transparent and pink, the hair blonde or brunette, and the eyelashes are long and sweeping. None of his patients have been anæmic, nor has the skin been thick, or the features coarse. The children had all, at the time they were under his observation, been healthy and bright and had not been feverish, nor have they had enlarged glands, phlyctenulæ, or other signs of tuberculosis. There had been no blepharitis, photophobia, lacrymation, or any external inflammatory manifestation, nor had there been any keratitis punctata, vitreous opacities, or any sign of chronic cyclitis. The patients were well fed, well cared for, open-air children. The ophthalmoscopic examination demonstrates in the final stage of the disease a patch of quiescent choroiditis or choroidal atrophy, in some cases excavated, generally surrounded by pigment, at or near the macula. The early stage is either a single solitary tubercle or an aggregation of three or four medium-sized tubercles. Central vision is always very poor. The optic disc may show atrophy of the macular bundle or it may itself be surrounded by tuberculous foci, and be in a state of complete secondary atrophy. Tuberculin may be of use diagnostically and therapeutically. The author gives details of the cases which have come under his observation. J. Allan.

Dermatology.

Congenital Mongolian blue patches (*'Lyon Méd.,'* 1910, *No.* 22, *p.* 1122).—**MM. Planchu** and **Rendu** showed at the Soc. de Méd. de Lyon a girl, born on February 20 in a lying-in hospital at Lyons, with a blue patch on the buttock as large as the palm of the hand. The outline was irregular and indefinite. Small similar patches existed on the left shoulder-blade and anterior superior iliac spine. There were no signs of Mongolism such as brachycephalus, obliquity of ocular slits, epicanthus, enlargement of inter-orbital space, etc. Intelligence seemed rather below the age, which was two months. As far as could be ascertained no ancestors had ever been abroad. The authors refer to the various theories of the cause of these patches, and conclude that they do not constitute a character of the Mongolian race but a normal phenomenon of development, presenting merely quantitative varieties according to race; they appear rather as stigmata of atavism in white races as an anomaly of reversive order, tending to prove that men have descended, from one and the same race, doubtless black, but certainly dark coloured and from one common and distant ancestor.

VINCENT DICKINSON.

The Mongolian blue patch (*'Thèses de Paris,'* 1909–10, *No.* 1).—**H. Carnot.**—This is situated as a rule in the sacral region. It is present at birth, and then gradually fades, and disappears entirely by the age of six or seven years. It was at first described as occurring only in the Mongolian race with a frequency of 80–90 per cent., but it is also found among coloured races generally. Within the last few years it has been noted among European children of a pure stock, among whom it occurs with an average frequency of 0·5 per cent. Histologically the patch is due to the presence of numerous richly pigmented cells situated in the deep layers of the dermis. These cells are grouped round the capillaries and are probably due to the proliferation of the endothelium. The occurrence of the patch in European children is not due to the introduction of Mongol or negro blood, but should be regarded as a mark of atavism, indicating a common descent from a black or dark-skinned ancestor. Carnot states that similar patches are met with in several species of monkeys, whereby another argument is furnished in favour of the doctrine of evolution. The thesis is inspired by Apert, who recorded the first case in France in 1909 at the Soc. Med. des Hôp., and contains an account of two cases, one of which has hitherto been unpublished.

J. D. ROLLESTON.

Epidermidolysis bullosa congenita (*'Journ. of Amer. Med. Assoc.,' April* 2, 1910).—**Kanoky** and **Sutton** saw a case of this uncommon disease in a girl, aged 3 years. It was characterised by vesicles, hæmorrhagic blebs and epidermic cysts on the skin in all parts, especially on the hands, where the skin was thin, parchment-like, and atrophic. The nails as the result of repeated exfoliation had atrophied and practically disappeared, and on the scalp were several bald spots. The lesions were frequently the result of slight injuries. Sections showed that in the skin there was œdema and absence of elastic tissue in the papillary and sub-papillary regions.

T. R. WHIPHAM.

Congenital ichthyosis (*'St. Petersburg. med. Woch.,' May* 8, 1910, *p.* 275).—**Hörschelmann** showed a girl, aged 4 years, who presented this

affection at birth. Her present weight was 36½ kilos. The skin was thickened everywhere, dark-coloured, and in places, such as the ears, nose, and forehead, very hard. There was no lanugo, the hair was well-grown.

M. D. Eder.

Cutaneous diphtheria (*'Brit. Med. Journ.,'* 1910, II, *p.* 859).—**G. W. Dawson** read a paper before the British Medical Association on ten cases, four of which he had seen himself. All but two occurred in children. Four died. Seven were of an impetiginous eczematous type, and in three there were vesicles or bullæ which gave rise to a profuse discharge. One of these was at first regarded as a case of dermatitis herpetiformis. Four had severe conjunctivitis. The most typical form occurs in children, and closely resembles impetiginous eczema, nearly always affecting the head and face, and associated with severe conjunctivitis, sometimes with otorrhœa and rhinitis. Owing to the ubiquity of harmless diphtheroid organisms the diagnosis of cutaneous diphtheria should not be made until the virulence of the organism has been tested. The disease is very resistant to ordinary treatment, lasting for years, but invariably responds to antitoxin. Dawson agrees with Trousseau in holding that a damaged epidermis is necessary for the invasion of the skin by diphtheria. In the subsequent discussion **Pernet** described a case in a child which had come under observation for a gangrenous lesion round the anus. Improvement followed local injections of carbolic acid, but palatal paralysis ensued. The diagnosis of diphtheria was then made and antitoxin was injected, but diaphragmatic paralysis and death soon occurred.

J. D. Rolleston.

Symmetrical gangrene after scarlet fever (*'Arch. f. Derm.,'* 1909, *Bd.* XCVI, *p.* 21).—**K. Potpeschnigg.**—An imbecile boy, aged 2 years, six weeks after the onset of scarlet fever developed swelling of both hands. A gangrenous patch subsequently appeared on the right index. On admission to hospital three months after the onset of scarlet fever all the fingers of both hands were gangrenous. Otherwise the physical condition of the child appeared normal. Gram-positive streptococci were cultivated from the purulent contents of the bullæ, and proved rapidly fatal to guinea-pigs after subcutaneous injection. The gangrene continued to extend, and on the sixth day after admission the temperature rose. Death took place five days later from septicæmia. No thrombosis of the large vessels of the extremities was found at the necropsy. In a review of the literature of post-infectious and spontaneous gangrene reference is made to the case recently recorded by Heubner (*v.* British Journal of Children's Diseases, 1909, *p.* 235). Potpeschnigg attributes the occurrence of gangrene in his own case to nervous influences without definitely affirming the existence of an angio- or tropho-neurosis.

J. D. Rolleston.

Hebra's prurigo and tuberculosis (*'Hospitalstidende,'* 1910, *p.* 835).—**H. Boas** tested twelve cases of Hebra's prurigo, ten of whom were children, with subcutaneous injections of tuberculin. Seven gave a positive and five a negative reaction. Boas concludes that Hebra's prurigo has no connection with tuberculosis.

J. D. Rolleston.

Œdema of the lower half of body (*'Wien. klin. Rundschau,' January* 23, 1910).—**Goldreich** showed a boy, aged 2 months, with chronic œdema of the lower half of the body. The swelling had a doughy feel and the upper

limit was sharply defined; no depression was left by the finger. **Rosenberg** found that the duration of the disease never extended beyond the third month, and usually was sharply limited by a straight line right under the navel. M. D. Eder.

Recurrent furunculosis in an infant showing an unusual blood picture (*'Journ. of Amer. Med. Assoc.,' June* 4, 1910).—**Leale** saw an infant, aged 3½ months, who had recurrent attacks of furuncles with fever. There was no marked anæmia, the hæmoglobin never being below 55 per cent. and the red corpuscles being up to the minimum normal for that age. The white corpuscles were not markedly increased in number: indeed, as a rule there was a leucopenia. Differential counts, however, showed small lymphocytes 61·8 to 69·2 per cent.; large lymphocytes 25·2 to 34 per cent.; polymorphonuclears 1 per cent.; eosinophiles 0·8 to 3·8 per cent.; basophiles 0·2 to 0·8 per cent. Cultivation of the pustules grew pure cultures of *Staphylococcus pyogenes aureus.* T. R. Whipham.

Noma (*'Arch. de Méd. des Enfant.,'* 1910, *p.* 666).—**M. Breuer.**—Noma is a comparatively rare affection. At the Hôpital St. Pierre, Brussels, on the average only one case is met with in a year out of a total of 450 admissions. As a rule it is a sequel of infectious diseases, especially measles. Attempts made to produce noma experimentally by inoculation of certain micro-organisms into animals have failed. At most abscesses at the injection site, and sometimes septicæmia have resulted. Breuer's own case was in a rickety girl, aged 2½ years, in whom the complication developed after disappearance of the measles rash. When death took place a week after the onset of the noma there was considerable destruction of the lips, tongue, alæ nasi, superior maxilla, vomer, and turbinate bones. At the necropsy were found numerous foci of broncho-pneumonia, degeneration of the kidneys, liver and myocardium. In addition to spirilla and different varieties of cocci, bacteriological examination showed a large number of thick bacilli closely resembling those described by Schimelbusch in 1889 as present in noma. Breuer concludes that noma is not a distinct disease due to a single germ, but holds that the debility caused by a previous illness, especially measles, prepares the ground for the development of certain microbial associations in which sometimes one and sometimes another micro-organism predominates. J. D. Rolleston.

Favus (*'El Siglo Médico,' June* 4, 1910, *p.* 355).—**Oyarzábal** denies that X rays are a good remedy for ordinary favus; they will cure the atypical form without the cup-shaped crusts just as they will any other cause of hair falling off. The only true remedy is epilation; this should be done with meticulous care, pulling out each hair in the direction of its growth and taking great care not to break it. In conjunction with this, ointments, such as sulphur 10–20 per cent., tar, juniper oil, ichthyol, should be applied at night and washed off in the morning. Favus of the body should be treated by plasters or baths. Favus of the nails requires emulsion if fomentations with Gram's solution or iodine dissolved in alcohol have no effect. M. D. Eder.

Treatment.

Diphtheria antitoxin in local treatment and prophylaxis (*'Lyon Méd.,' June* 5, 1910).—**Thevenot** recommends the local application of dried

antitoxin as an additional treatment of diphtheria and also for a time after recovery. Tablets of the dried serum are allowed to melt in the mouth and aid in sterilising the throat. The local application may also be useful as a prophylactic measure. T. R. WHIPHAM.

Treatment of scarlet fever (*'Berlin. klin. Wochens.,' May* 16, 1910). —**Jochmann** and **Michaelis** consider that it is the presence of the streptococcus which renders scarlet fever especially severe, though it is not to be regarded as the actual cause. They have obtained good results by combining anti-streptococcus serum with vaccine therapy, and find that the effects are better than if either be employed alone. In fifty-two severe cases in which they carried out this method fourteen of the patients died and thirty-eight recovered without any complications. The absence of nephritis they regard as more than a mere coincidence. A number of patients recovered in whom streptococci had been found in the blood, whereas previously scarcely any such survived. T. R. WHIPHAM.

The use of vaccines, serums, and the Hiss extract of leucocytes in the treatment of eye, ear, nose, and throat affections (*'New York Med. Record,'* July 30, 1910, *p.* 178).—**J. G. Dwyer**, in a long and interesting paper, comes to conclusions which may be briefly stated as follows: (1) Vaccines are contra-indicated in acute constitutional diseases (pyæmia, etc.), but the leucocyte extract finds its greatest field of usefulness. (2) In the locally acute, subacute, and chronic cases, the vaccines are more useful and act almost as specifics. (3) Autogenous vaccines should always be used. (4) Fresh vaccines should be made frequently. (5) Administration should be guided by clinical symptoms. (6) Tuberculin should not be used in tuberculosis when general constitutional symptoms are present. (7) Small doses often repeated are better than large ones seldom repeated. (8) Always have in view the danger of anaphylaxis. (9) Always combine other general medicinal and hygienic measures with the vaccine treatment. (10) Do not, in serious cases, wait until the patient is *in extremis*, but start the leucocyte extract early. Several striking cases are described, notably one of pansinusitis in a child, aged 9 years, and one of acute mastoiditis in an infant, aged 18 months. MACLEOD YEARSLEY.

Vaccines in the treatment of various bacterial infections in infants and young children (*'New York Med. Record,' August* 6, 1910, *p.* 229).—**Gill** gives a preliminary and lucid explanation of Wright's opsonin theory and describes his own experience, extending over six months and forty-nine cases. Thirty-nine of these were subacute or chronic otitis media. Of these twenty-eight were cured, ten were improved, and one remained unimproved. Of these cases some details are given. He does not consider it necessary to take the opsonic index in these cases, preferring to rely upon the clinical symptoms. The only treatment locally was washing out the ears with boric acid solution. Gill considers that the use of vaccines gives a powerful aid in dealing with local infections.

MACLEOD YEARSLEY.

A suppurative adenitis treated with streptococcus vaccine (*'New York Med. Rec.,' September* 17, 1910, *p.* 492).—**F. O. de Beeck** describes two cases. The second was a child aged 5 years, with a suppurative adenitis following a sore throat, with a temperature of 103° F. Three injections

of streptococcus vaccine of 5,000,000 each were made. In six days the temperature was normal and the "adeno-plegmon" (*sic*) underwent resolution. MACLEOD YEARSLEY.

Treatment of spasm of the glottis with a milk-free diet (*'Therap. Monatschr.,' May,* 1910).—**Fischbein** and **Langstein** assert that a change from cow's milk to a carbohydrate diet is often a prompt remedy in cases of spasm of the glottis and general convulsions in a diathesis tending to spasm. The change in diet may differentiate such cases when the signs otherwise are suggestive of meningitis or otitis media. It is also useful in controlling the paroxysms of whooping-cough. A starch diet, however, may have a bad effect on infants suffering from gastro-intestinal disturbances, and in these breast-milk is alone permissible. T. R. WHIPHAM.

Treatment of severe laryngitis in measles (*'Thèses de Paris,'* 1909–10, *No.* 452).—**A. Girard** describes two varieties of laryngitis in measles: (1) True measles laryngitis without diphtheria bacilli. (2) Diphtheritic laryngitis. Each of these may be pre-eruptive, co-eruptive, or post-eruptive. Medical treatment is often sufficient for the first variety, and should consist in the administration of anti-spasmodics and injection of morphia together with fomentations to the neck and cold applications to the thorax. If these fail, intubation should be resorted to. In the pre-eruptive stage the stay of the tube in the larynx will be only twenty-four hours, but in the co-eruptive or post-eruptive stages will be prolonged to four days. In diphtheritic laryngitis occurring in measles antitoxin should be injected early and in large doses. Medical treatment is not so successful as in the first variety, but intubation should be employed when surgical intervention becomes necessary. J. D. ROLLESTON.

Treatment of empyema without resection of a rib (*'Journ. of Amer. Med. Assoc.,' April* 30, 1910).—**Colton** advocates the drainage of purulent pleural effusions by means of a silver tube without resection of a rib. At the operation the patient is placed on the affected side with a pad under the back, and an incision is made in the seventh or eighth interspace in the mid-axillary line, where the ribs are usually farthest apart and the chest-wall thinnest. After the evacuation of the pus by the introduction of dressing forceps a small silver drainage-tube is inserted. The external end of the tube is split in two diameters at right angles to one another and the four pieces thus formed are bent outwards, so as to lie over the skin and hold the tube in position. The average length of time for the use of the tube in the author's experience has been about twenty-one days.

T. R. WHIPHAM.

Treatment of chorea with large doses of arsenic (*'Med. Record,' July* 2, 1910).—**Hassin** and **Herschfield** conclude that arsenious acid in a one in a thousand solution is safer than Fowler's solution. A boy, aged 8 years, was found to bear five teaspoonfuls of the arsenious acid solution, (*i. e.* $\frac{1}{3}$ gr.) but showed signs of intolerance from nine minims of Fowler's solution even after his system had been somewhat used to the drug. The time of treatment is considerably shortened by using the acid, improvement being noticed very early. The authors do not consider it excusable to deprive chorea patients of the benefits of arsenic on account of possible complications.

The ill-effects of arsenical treatment can be mitigated by using arsenious acid and can be avoided by paying attention to the condition of the gastro-intestinal and renal tracts. T. R. Whipham.

Treatment and education of abnormal children in hospital schools (*'Journ. de Méd. de Bord.,'* 1910, *p.* 546).—**Cruchet** classifies these in two groups. First, physically infirm children suffering from anæmia, scrofula, coxalgias, partially blind or deaf, epileptics, etc.; these cannot be taught in an ordinary school, and if left to themselves fall into habits of laziness or vice against which it is very difficult to strive. The second group are children with a purely corporal trouble such as hemiplegia, myopathies, cerebral sclerosis, to which are added mental troubles; these children are a great tax on their parents and cannot be taken into any ordinary school or hospital. Before entering the school the children are examined in vision, hearing, speech, etc., and the hours of work and kind of teaching determined upon. They are subjected to a vigorous hygiene, including massage, orthopædy, etc, where indicated, and to special forms of gymnastics, etc. Many children can be sent back to their parents after six months to two years of treatment; others, of course, require longer stay. Anyhow, in this way many infirm children may be rendered fit for an active life and for a society which would have otherwise been impossible for them. J. Porter Parkinson.

Treatment of nævus with light and radium (*'Deutsch. med. Wochens.,' February* 17, 1910).—**Kromayer** reports forty cases which he has treated with either the mercury quartz lamp or radium, or with both of these measures. Small arterial nævi react favourably to the radium treatment as its action is deeper than that of the lamp, but the latter is effectual for extensive reddish and purple nævi if they are superficial and chiefly due to dilatation of capillaries, with but slight involvement of the arteries. Moderately large, mixed nævi require a combination of both light and radium treatment. The author has never obtained any durable benefit from X-ray treatment, the action on the vessels being different to that of radium. With the mercury lamp four or five exposures were given, and not more than two or three with the radium, the duration of the exposures being never over an hour. Only a few of the cases derived no benefit from the treatment. T. R. Whipham.

Reviews of Books.

The Diseases of Children. By J. F. Goodhart, M.D., LL.D., F.R.C.P. Ninth edition. Edited by G. F. Still, M.A., M.D., F.R.C.P. London: J. and A. Churchill, 1910. Price 15*s.* net.

If it be true that "good wine needs no bush," it is true that a ninth edition needs no criticism. In commending the present issue we have to mention certain new features. There are a few illustrations which may interest those to whom this form of instruction appeals, and there is much new

matter—the book is larger by one hundred pages—while every chapter bears evidence of most careful pruning and grafting of the old stock.

Thus, there are notes on the various tuberculin reactions, a new section on the status lymphaticus, and, to instance the revision, the chapter on scarlet fever is almost entirely re-written, and includes mention of Dr. Milne's eucalyptus oil inunction treatment, and the use of polyvalent serum.

In Dr. Milne's hands the eucalyptus treatment has produced striking results, which, perhaps, suggest nothing more than that scarlet fever is less contagious than is usually supposed; at present they await confirmation by other observers.

The value of the recognition of Koplik's spots in the early diagnosis of measles is emphasised, and confirms the favourable reports of the German and American authorities.

In the treatment of diphtheritic paralysis the use of adrenalin has been so favourably reported upon—and confirmed by the reviewer in his own practice—that it deserves, but does not receive, mention in this edition.

Surgical conditions receive considerable attention, and the authors, with a wide conception of the meaning of medical treatment, have included an account of the necessary operative procedures. The remarks on tracheotomy and on the treatment of empyema are admirably judicial and helpful.

To those who do not know this treatise we recommend a study of the introductory chapter, which deals with the modifications in the recognition and treatment of disease incidental to infancy and early childhood. The first nine chapters, on the newborn infant, natural and artificial feeding of infants, and diet disorders, are of especial value, and the appendix of formulæ employed by the authors will be found a most useful guide to the drug treatment of children.

To those who know their "Goodhart and Still" we need say no more than that this edition is larger, more up-to-date, and more advanced than its predecessors.

Diseases of the Skin, including Radiotherapy and Radium-therapy. By Ernest Gaucher, Professor of Cutaneous and Syphilitic Diseases at the Faculty of Medicine and Physician to the St. Louis Hospital, Paris. Translated and edited by C. F. Marshall, M.Sc., M.D., F.R.C.S., Surgeon to the British Skin Hospital. With numerous illustrations. London: John Murray, 1910. Price 15s. net.

This book, as we learn from the preface, comprises the second edition of the volume on diseases of the skin in the 'Nouveau Traité de Médecine' of Bouchard, Gilbert, and Thoinot, written by Professor Gaucher in collaboration with other authorities; together with chapters on cutaneous syphilides and the treatment of syphilis from Professor Gaucher's 'Précis de Syphiligraphie.' In the introduction an interesting account is given of the old doctrines of diathesis and metastasis, which, in a modified form, Professor Gaucher still upholds. A striking feature of the work is the simplicity of the general treatment and the absence of new-fangled remedies. As an example of this we may mention the treatment of acute eczema by compresses of aseptic gauze soaked in boiled water.

The value of radium in the treatment of nævi is shown in a series of striking photographs by Wickham and Degrais, who state that the convenience and painlessness of the application are of special value in young children

who can be treated during sleep. The X-ray treatment of nævi, according to Gastou, is also satisfactory, provided the child can be induced to keep still long enough.

On p. 334 the new methods for treating lupus are described, and the relative merits of phototherapy, radiotherapy, and radium-therapy discussed.

In his account of the X-ray treatment of ringworm, by which the duration of treatment is reduced from two years to three months, Professor Gaucher urges the necessity of very careful manipulations, as he has seen three cases treated by an expert in which the rays caused incurable cicatricial alopecia with atrophy of the skin and telangiectases. Dr. Marshall is to be warmly congratulated on his excellent translation, the value of which will be particularly appreciated in the highly technical description of treatment by radium and X rays. Readers should be grateful for the addition of an index, which is wanting in the original.

Medical Supervision in Schools. By E. M. Stevens, M.B., Ch.M., Royal Commissioner for South Australia. London: Baillière, Tindall & Cox, 1910. Pp. 268. Price 5s. net.

After a description of the origin and purport of medical inspection and a sketch of the English Act and its provisions, a full account is given of the London system. A chapter is then devoted to the Cambridge Dental Institution. The following six chapters deal with medical inspection in Scotland, and the rest of the book is concerned with the methods adopted by the United States, Germany, and Switzerland. Contrary to the usual opinion, the school children of Germany, particularly those of Wiesbaden, are instanced as the most hunger-stricken in Europe. The author everywhere rightly insists on the absolute necessity of providing abundant nourishing food for the school children if the money spent on education is not utterly to be wasted. The position of the hungry, ignorant and helpless parents is justly stated. The picture of the average American school medical officer with baggy, greasy habiliments, unclean linen, a three days' beard, and a quid of tobacco in his cheek is somewhat startling.

The book is well printed, illustrated and indexed, and can be cordially recommended to medical men, school teachers and inspectors. The summaries, lists of objections, and estimates of costs are excellent features.

Zur Kenntnis der Orthotischen Albuminurie. By Fritz Götzky. Berlin: S. Karger, 1910. Price 5 marks.

This is a contribution to the literature bearing on the problems which still surround the subject of orthotic, or orthostatic, or postural albuminuria. The German and French views are given in full, and the writer then proceeds to give clinical details of the examination of twelve cases under his own care. His conclusion is that, while a pure postural albuminuria without nephritis does exist, the subjects of this condition are liable at any time to develop nephritis from some acute infection, which may be trifling in itself *e.g.* tonsillitis. The result is chronic nephritis, or, as he terms it, orthotic nephritis. The condition is determined by the finding of renal casts or red blood-cells in the urine of a patient with the other signs of postural albuminuria. He agrees with other writers in recognising a

general constitutional disturbance in the subjects of postural albuminuria, as manifested by headache, weariness, loss of appetite, and palpitation, but is not prepared to say what the nature of it is. The neurasthenic or hysterical symptoms accompanying the trouble are accidental, not causative. He notes a condition of dermography as being present in all his cases of orthotic albuminuria. Fluctuation in the amount of albumin from day to day under the same conditions of life is one of the puzzling features of this disease. In discussing the pathogenesis, he refers to the two theories as to the origin of the albuminuria, the mechanical and the vaso-motor. He believes there is deficient vaso-motor control which shows itself on a change of posture by a diminution of the arterial pressure, and consequent disturbance of the renal function.

Correspondence.

DWARFISM OF SUPRARENAL ORIGIN?

To the Editor of The British Journal of Children's Diseases.

Sir,—The abstract with the above heading on p. 464 of your last issue describes a rare disease of a striking character, two cases of which were recorded in the 'Medico-Chirurgical Transactions' of 1892 and afterwards in the 'Practitioner,' 1904, where it was named "progeria."

Upon referring to the admirable description and pictures of their case given in detail by MM. Variot and Pironneau in the 'Bull. de la Soc. de Pédiat. de Paris' for June, 1910, it is obvious that the resemblance to those two original cases is so close that the description of one would in all essentials almost serve for the description of the others.

Progeria has been noticed in some serial publications, as well as in Osler's 'Medicine,' Osler and McCrae's 'System,' and Cautley's 'Diseases of Children.'

Since the details of the first two cases were published a look out has been kept for the report of fresh examples of the disease, but hitherto without success. The disease must therefore, fortunately, be exceedingly uncommon, for it is of such a sensational character that it is hardly possible that it should be passed by without attracting special attention. A post-mortem examination was made of one of the original cases which died at eighteen, when it was found that the mingled infantilism and senilism which characterised the external features of the malady were also manifest in the internal organs. Among the organs prematurely senile were the supra-renal bodies, but there was no indication that their atrophy was anything more than incidental to the general senility.

Yours truly,

Hastings Gilford.